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* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 FEB 27 New STN AnaVist pricing effective March 1, 2006
NEWS 4 MAY 10 CA/CAPLUS enhanced with 1900-1906 U.S. patent records
NEWS 5 MAY 11 KOREAPAT updates resume
NEWS 6 MAY 19 Derwent World Patents Index to be reloaded and enhanced
NEWS 7 MAY 30 IPC 8 Rolled-up Core codes added to CA/CAPLUS and
USPATFULL/USPAT2
NEWS 8 MAY 30 The F-Term thesaurus is now available in CA/CAPLUS
NEWS 9 JUN 02 The first reclassification of IPC codes now complete in
INPADOC
NEWS 10 JUN 26 TULSA/TULSA2 reloaded and enhanced with new search and
and display fields
NEWS 11 JUN 28 Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 12 JUL 11 CHEMSAFE reloaded and enhanced
NEWS 13 JUL 14 FSTA enhanced with Japanese patents
NEWS 14 JUL 19 Coverage of Research Disclosure reinstated in DWPI
NEWS 15 AUG 09 INSPEC enhanced with 1898-1968 archive
NEWS 16 AUG 28 ADISCTI Reloaded and Enhanced
NEWS 17 AUG 30 CA(SM)/CAPLUS(SM) Austrian patent law changes

NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8
NEWS X25 X.25 communication option no longer available

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:36:47 ON 06 SEP 2006

10765267Amend

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:36:58 ON 06 SEP 2006
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STRUCTURE FILE UPDATES: 5 SEP 2006 HIGHEST RN 905905-44-4
DICTIONARY FILE UPDATES: 5 SEP 2006 HIGHEST RN 905905-44-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

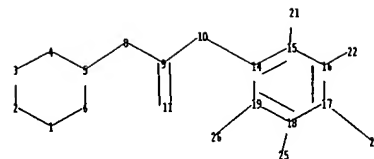
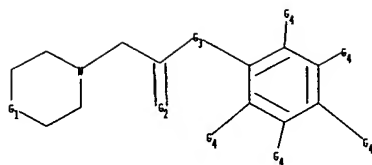
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=>

Uploading C:\Program Files\Stnexp\Queries\10765267phenol.str



chain nodes :

8 9 10 11 21 22 24 25 26

ring nodes :

1 2 3 4 5 6 14 15 16 17 18 19

chain bonds :

5-8 8-9 9-10 9-11 10-14 15-21 16-22 17-24 18-25 19-26

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-8 8-9 9-10 9-11 10-14 15-21 16-22 17-24
18-25 19-26

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19

G1:C,O,N,P

G2:O,S,N

G3:O,S

G4:H,NO2,X

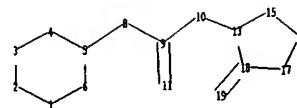
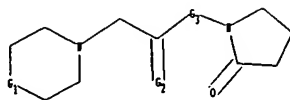
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 21:CLASS 22:CLASS
24:CLASS 25:CLASS 26:CLASS

L1 STRUCTURE UPLOADED

=>

Uploading C:\Program Files\Stnexp\Queries\10765267succinimide.str



chain nodes :

8 9 10 11 19

ring nodes :

1 2 3 4 5 6 13 15 16 17 18

chain bonds :

5-8 8-9 9-10 9-11 10-13 18-19

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 13-15 13-18 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-8 8-9 9-10 9-11 10-13 13-15 13-18 15-16
16-17 17-18 18-19

G1:C,O,N,P

G2:O,S,N

G3:O,S

Match level :

10765267Amend

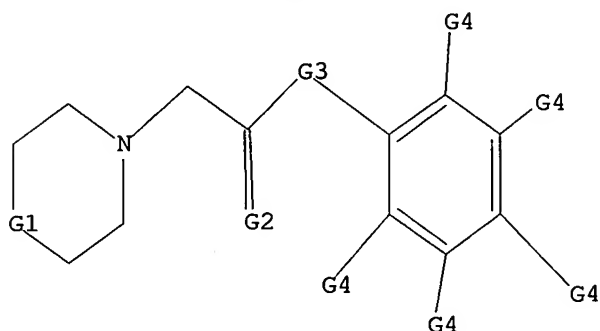
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11:CLASS 13:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS

L2 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C,O,N,P

G2 O,S,N

G3 O,S

G4 H,NO2,X

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 15:37:44 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 4657 TO ITERATE

42.9% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 89048 TO 97232
PROJECTED ANSWERS: 1 TO 137

L3 1 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 15:37:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 93042 TO ITERATE

100.0% PROCESSED 93042 ITERATIONS
SEARCH TIME: 00.00.01

152 ANSWERS

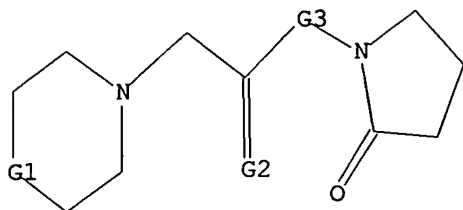
L4 152 SEA SSS FUL L1

10765267Amend

=> d 12

L2 HAS NO ANSWERS

L2 STR



G1 C,O,N,P

G2 O,S,N

G3 O,S

Structure attributes must be viewed using STN Express query preparation.

=> s 12

SAMPLE SEARCH INITIATED 15:37:56 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 44 TO 476

PROJECTED ANSWERS: 2 TO 124

L5 2 SEA SSS SAM L2

=> s 12 full

FULL SEARCH INITIATED 15:38:00 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 281 TO ITERATE

100.0% PROCESSED 281 ITERATIONS

33 ANSWERS

SEARCH TIME: 00.00.01

L6 33 SEA SSS FUL L2

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

333.88

334.09

FILE 'CAPLUS' ENTERED AT 15:38:04 ON 06 SEP 2006

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FILE COVERS 1907 - 6 Sep 2006 VOL 145 ISS 11
FILE LAST UPDATED: 5 Sep 2006 (20060905/ED)

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=> d his

(FILE 'HOME' ENTERED AT 15:36:47 ON 06 SEP 2006)

FILE 'REGISTRY' ENTERED AT 15:36:58 ON 06 SEP 2006

L1	STRUCTURE UPLOADED
L2	STRUCTURE UPLOADED
L3	1 S L1
L4	152 S L1 FULL
L5	2 S L2
L6	33 S L2 FULL

FILE 'CAPLUS' ENTERED AT 15:38:04 ON 06 SEP 2006

=> s l6 and (isotope or isotop?)

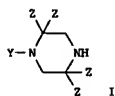
	21 L6
	227669 ISOTOPE
	326525 ISOTOP?
L7	5 L6 AND (ISOTOPE OR ISOTOP?)

=> s l4 and (isotope or isotop?)

	52 L4
	227669 ISOTOPE
	326525 ISOTOP?
L8	3 L4 AND (ISOTOPE OR ISOTOP?)

=> d ed abs ibib hitstr 1-3

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
GI



AB Isotopically enriched N-substituted piperazines (I) or salts thereof, comprising one or more heavy atom isotopes (Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or fluorine atoms; Z = independently H, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms), or a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms), or a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group; wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms; wherein the N-methylpiperazine is isotopically enriched with either of 13C and/or 15N) are prepared N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like (no data). Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

ACCESSION NUMBER: 2005:592130 CAPLUS

DOCUMENT NUMBER: 143:15574

TITLE: Preparation of isotopically enriched

N-substituted piperazines

INVENTOR(S): Pappin, Darryl J. C.; Pillai, Sasi; Coull, James M.

PATENT ASSIGNEE(S): Applera Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 29 pp.

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148773	A1	20050707	US 2004-751388	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

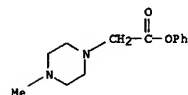
OTHER SOURCE(S): MARPAT 143:15574

IT 856187-95-6, 4-Methylpiperazine-1-acetic acid phenyl ester

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 856187-95-6 CAPLUS

CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



IT 857027-10-2P 857503-00-5P 857503-01-6P

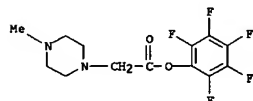
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RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 857027-10-2 CAPLUS

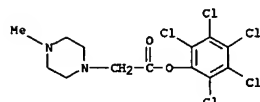
CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



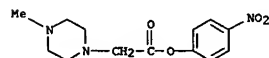
RN 857503-00-5 CAPLUS

CN 1-Piperazineacetic acid, 4-methyl-, pentachlorophenyl ester (9CI) (CA INDEX NAME)



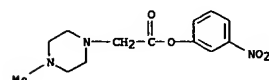
RN 857503-01-6 CAPLUS

CN 1-Piperazineacetic acid, 4-methyl-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)



RN 857503-03-8 CAPLUS

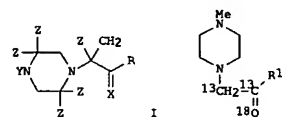
CN 1-Piperazineacetic acid, 4-methyl-, 3-nitrophenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 08 Jul 2005

GI



AB In some embodiments, this invention pertains to active esters of N-substituted piperazine acetic acid I (R = leaving group; X = O, S; Y = C1-C6 alkyl, C1-C6 alkyl ether; Z = H, 2H, F, Cl, Br, iodide, amino acid side chain, C1-C6 alkyl, C1-C6 alkyl ether), including isotopically enriched versions thereof. In some embodiments, this invention pertains to methods for the preparation of active esters of N-substituted piperazine acetic acid, including isotopically enriched versions thereof. For example, the isotopically labeled N-methylpiperazine II (R1 = 18OH) reacted with the trifluoroacetic acid ester of N-hydroxysuccinimide to give the succinate II (R1 = OR2, R2 = succinimido).

ACCESSION NUMBER: 2005:592129 CAPLUS

DOCUMENT NUMBER: 143:97398

TITLE: Preparation of active esters of N-substituted

piperazine acetic acids, including

isotopically enriched versions

INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Puckayastha,

Subhasish; Pillai, Sasi; Coull, James M.

PATENT ASSIGNEE(S): Applera Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 33 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148771	A1	20050707	US 2004-751354	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

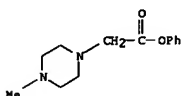
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-751353 A 20040105
US 2004-751354 A 20040105

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:97398
IT 856187-95-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of active esters of N-substituted piperazine acetic acids
and their labeled derivs.)
RN 856187-95-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



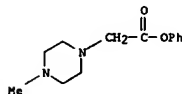
L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
SOURCE: U.S. Pat. Appl. Publ., 29 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148774	A1	20050707	US 2004-751387	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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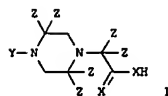
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US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:115568
IT 856187-95-6, 4-Methylpiperazine-1-acetic acid phenyl ester
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 856187-95-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



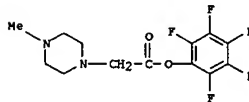
IT 857027-10-2P 857503-00-5P 857503-01-6P
857503-03-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 857027-10-2 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
GI

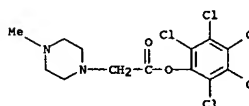


AB Isotopically enriched N-substituted piperazine-1-acetic acids
(I) or salts thereof, comprising one or more heavy atom isotopes
[X = O, S; Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or F atoms; Z = independently H, deuterium, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms, or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms)] are prepared
N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like.
Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.
on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.
ACCESSION NUMBER: 2005:588426 CAPLUS
DOCUMENT NUMBER: 143:115568
TITLE: Preparation of isotopically enriched N-substituted piperazine-1-acetic acids
Dey, Subhakar; Pappin, Darryl J. c.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.
PATENT ASSIGNEE(S): Applera Corp., USA

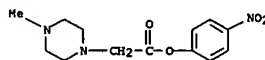
L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



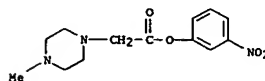
RN 857503-00-5 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, pentachlorophenyl ester (9CI) (CA INDEX NAME)



RN 857503-01-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)



RN 857503-03-8 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, 3-nitrophenyl ester (9CI) (CA INDEX NAME)



10765267Amend

=> d his

(FILE 'HOME' ENTERED AT 15:36:47 ON 06 SEP 2006)

FILE 'REGISTRY' ENTERED AT 15:36:58 ON 06 SEP 2006

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 1 S L1

L4 152 S L1 FULL

L5 2 S L2

L6 33 S L2 FULL

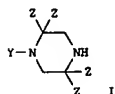
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L7 5 S L6 AND (ISOTOPE OR ISOTOP?)

L8 3 S L4 AND (ISOTOPE OR ISOTOP?)

=> d ed abs ibib hitstr L7 1-5

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ED Entered STN: 08 Jul 2005
 GI



AB Isotopically enriched N-substituted piperazines (I) or salts thereof, comprising one or more heavy atom isotopes (Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or fluorine atoms; Z = independently H, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H or F atoms, a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms), or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group; wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms; wherein the N-methylpiperazine is isotopically enriched with either of 13C and/or 15N) are prepared N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like (no data). Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

ACCESSION NUMBER: 2005:592130 CAPLUS

DOCUMENT NUMBER: 143:115574

TITLE: Preparation of isotopically enriched N-substituted piperazines

INVENTOR(S): Pappin, Darryl J. C.; Pillai, Sasi; Coull, James M.

PATENT ASSIGNER(S): Applera Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 29 pp.

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148773	A1	20050707	US 2004-751388	20040105
AU 2005205522	A1	20050728	AU 2005-205522*	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:
 US 2004-751353 A 20040105
 US 2004-751354 A 20040105
 US 2004-751387 A 20040105
 US 2004-751388 A 20040105
 US 2004-822639 A 20040412
 US 2004-852730 A 20040524
 WO 2005-US223 W 20050105

OTHER SOURCE(S):

MARPAT 143:115574

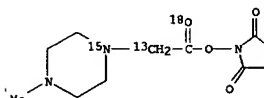
IT 856188-20-0P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 856188-20-0 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)-1-15N]acetyl-2-13C-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

IT 856188-16-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

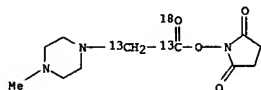
L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

(Reactant or reagent)

(prepn. of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 856188-16-4 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

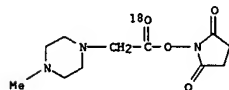
IT 856187-87-6P 856188-06-2P 857027-09-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

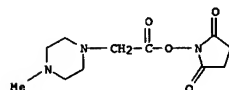
RN 856187-87-6 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)



RN 856188-06-2 CAPLUS

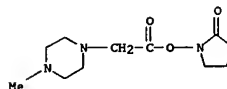
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



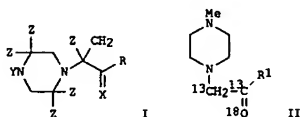
RN 857027-09-9 CAPLUS

CN 2-Pyrrolidinone, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
GI



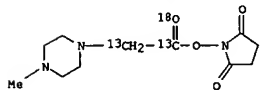
AB In some embodiments, this invention pertains to active esters of N-substituted piperazine acetic acid I (R = leaving group; X = O, S; Y = C1-C6 alkyl, C1-C6 alkyl ether; Z = H, 2H, F, Cl, Br, iodide, amino acid side chain, C1-C6 alkyl, C1-C6 alkyl ether), including isotopically enriched versions thereof. In some embodiments, this invention pertains to methods for the preparation of active esters of N-substituted piperazine acetic acid, including isotopically enriched versions thereof. For example, the isotopically labeled N-methylpiperazine II (R1 = 18O) reacted with the trifluoroacetic acid ester of N-hydroxysuccinimide to give the succinate II (R1 = OR2, R2 = succinimide).

ACCESSION NUMBER: 2005:592129 CAPLUS
DOCUMENT NUMBER: 143:97398
TITLE: Preparation of active esters of N-substituted piperazine acetic acids, including isotopically enriched versions
INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.
PATENT ASSIGNEE(S): Applera Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 33 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148771	A1	20050707	US 2004-751354	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

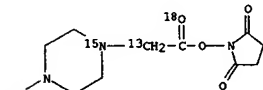
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, XG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● 2 HCl

RN 856188-20-0 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl-1-15N)acetyl-2-13C-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



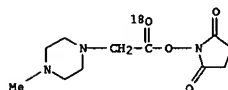
● 2 HCl

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

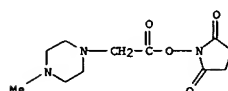
PRIORITY APPLN. INFO.:
US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040112
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:97398
IT 856187-87-6P 856188-06-2P 856188-16-4P
856188-20-0P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of active esters of N-substituted piperazine acetic acids and their labeled derivs.)
RN 856187-87-6 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)

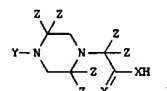


RN 856188-06-2 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



RN 856188-16-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
GI



AB Isotopically enriched N-substituted piperazine-1-acetic acids (I) or salts thereof, comprising one or more heavy atom isotopes (X = O, S; Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or F atoms; Z = independently H, deuterium, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms, or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms)) are prepared. N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small molecules and the like. Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

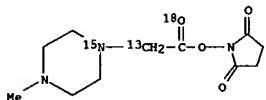
ACCESSION NUMBER: 2005:598426 CAPLUS
DOCUMENT NUMBER: 143:115568
TITLE: Preparation of isotopically enriched N-substituted piperazine-1-acetic acids
INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.
PATENT ASSIGNEE(S): Applera Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 29 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148774	A1	20050707	US 2004-751387	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LJ, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353 A 20040105		
		US 2004-751354 A 20040105		
		US 2004-751387 A 20040105		
		US 2004-751388 A 20040105		
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		US 2004-852730 A 20040524		
		WO 2005-US223 W 20050105		

OTHER SOURCE(S): MARPAT 143:115568

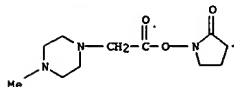
IT 856188-20-0P
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 856188-20-0 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)-1-15N]acetyl-2-13C-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



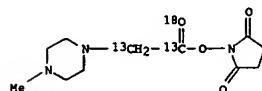
●2 HCl

IT 856188-16-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

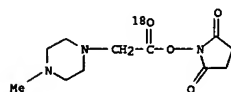


L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 856188-16-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)

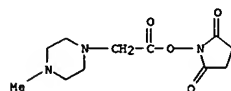


●2 HCl

IT 856187-87-6P 856188-06-2P 857027-09-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 856187-87-6 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)



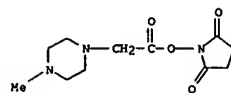
RN 856188-06-2 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



RN 857027-09-9 CAPLUS
CN 2-Pyrrolidinone, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 16 May 2005
AB Glycerophosphoethanolamine (GPEtn) and glycerophosphoserine (GPser) lipids were reacted with a multiplexed set of differentially isotopically enriched N-methylpiperazine acetic acid N-hydroxysuccinimide ester reagents, which place isobaric mass labels at a primary amino group. The resulting derivitized aminophospholipids were isobaric and chromatog. indistinguishable but yielded pos. reporter ions (m/z 114 or 117) after collisional activation that could be used to identify and quantify individual members of the multiplex set. The chromatog. and mass spectrometric response of N-methylpiperazine amide-tagged aminophospholipids was probed using glycerophosphoethanolamine and glycerophosphoserine lipid stds. The [M+H]⁺ of each tagged aminophospholipid shifted 144 Da, and during collision-induced dissociation the major fragmentation ion was either m/z 114 or 117. This mode of detecting aminophospholipids was useful for an unbiased anal. of plasmalogen GPEtn lipids. Mol. species information on the esterified fatty acyl substituents was obtained by collisional activation of the [M+H]⁺ ions. The isotope-tagged reagents were used to assess changes in the distribution of GPEtn lipids after exposure of liposomes made from phospholipids extracted from RAW 264.7 cells to Cu2+/H2O2 to illustrate the ability of these reagents to aid in the mass spectrometric identification of aminophospholipid changes that occur during biol. stimuli.

ACCESSION NUMBER: 2005:412987 CAPLUS
DOCUMENT NUMBER: 144:186804
TITLE: Analysis of cell membrane aminophospholipids as isotope-tagged derivatives
AUTHOR(S): Zemski Berry, Karin A.; Murphy, Robert C.
CORPORATE SOURCE: Department of Pharmacology, University of Colorado Health Sciences Center, Aurora, CO, 80045, USA
SOURCE: Journal of Lipid Research (2005), 46(5), 1038-1046
CODEN: JLPRAW; ISSN: 0022-2275
PUBLISHER: American Society for Biochemistry and Molecular Biology, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 856188-06-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and mass spectrometric anal. of cell membrane aminophospholipids as isotope-tagged derivs.)
RN 856188-06-2 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Oct 2004

AB Provided is a method for characterizing a mol. by mass spectrometry, which mol. comprises one or more free amino groups, which method comprises: (a) reacting one or more free amino groups in the mol. with a mass tag reagent comprising a reactive functionality capable of reacting with an amino group, and a tertiary amino group linked to the reactive functionality; and (b) characterizing the mol. by mass spectrometry.

ACCESSION NUMBER: 2004:824132 CAPLUS

DOCUMENT NUMBER: 141:310231

TITLE: Mass labels

INVENTOR(S): Hamon, Christian; Kuhn, Karsten; Thompson, Andrew; Reuschling, Dieter; Schaefer, Juergen

PATENT ASSIGNEE(S): Xzillion G.m.b.H. & Co. K.-G., Germany; Proteome Sciences PLC

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

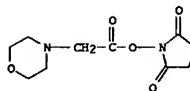
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

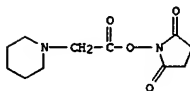
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WO 2004086050	A3	20041229		
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RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004223631	A1	20041007	AU 2004-223631	20040318
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EP 1606623	A2	20051221	EP 2004-721565	20040318
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NO 2005004684	A	20051012	NO 2005-4684	20051012
PRIORITY APPLN. INFO.:			GB 2003-6756	A 20030324
			WO 2004-GB1167	W 20040318
IT 741683-76-1P 741683-79-4P 768385-34-8P				
RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
(mass labels)				
RN 741683-76-1 CAPLUS				
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)				

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



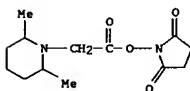
RN 741683-79-4 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 768385-34-8 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[2,6-dimethyl-1-piperidinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



N/D.

10765267Amend

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

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SESSION

FULL ESTIMATED COST

50.52

384.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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NEWS 3 FEB 27	New STN AnaVist pricing effective March 1, 2006
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NEWS 5 MAY 11	KOREAPAT updates resume
NEWS 6 MAY 19	Derwent World Patents Index to be reloaded and enhanced
NEWS 7 MAY 30	IPC 8 Rolled-up Core codes added to CA/CAPLUS and USPATFULL/USPAT2
NEWS 8 MAY 30	The F-Term thesaurus is now available in CA/CAPLUS
NEWS 9 JUN 02	The first reclassification of IPC codes now complete in INPADOC
NEWS 10 JUN 26	TULSA/TULSA2 reloaded and enhanced with new search and display fields
NEWS 11 JUN 28	Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 12 JUL 11	CHEMSAFE reloaded and enhanced
NEWS 13 JUL 14	FSTA enhanced with Japanese patents
NEWS 14 JUL 19	Coverage of Research Disclosure reinstated in DWPI
NEWS 15 AUG 09	INSPEC enhanced with 1898-1968 archive
NEWS 16 AUG 28	ADISCTI Reloaded and Enhanced
NEWS 17 AUG 30	CA(SM)/CAPLUS(SM) Austrian patent law changes
NEWS EXPRESS	JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
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TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

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DICTIONARY FILE UPDATES: 5 SEP 2006 HIGHEST RN 905905-44-4

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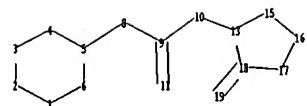
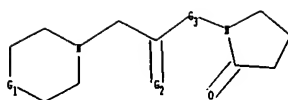
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=>

Uploading C:\Program Files\Stnexp\Queries\10765267succinimide.str



chain nodes :

8 9 10 11 19

ring nodes :

1 2 3 4 5 6 13 15 16 17 18

chain bonds :

5-8 8-9 9-10 9-11 10-13 18-19

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 13-15 13-18 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-8 8-9 9-10 9-11 10-13 13-15 13-18 15-16
16-17 17-18 18-19

G1:C,O,N,P

G2:O,S,N

G3:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 13:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS

L1 STRUCTURE UPLOADED

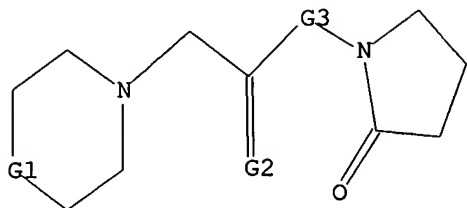
10765267Amend2

,

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 C,O,N,P

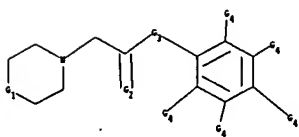
G2 O,S,N

G3 O,S

Structure attributes must be viewed using STN Express query preparation.

=>

Uploading C:\Program Files\Stnexp\Queries\10765267phenol.str

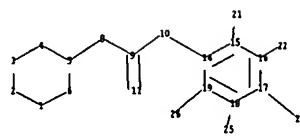


chain nodes :

8 9 10 11 21 22 24 25 26

ring nodes :

1 2 3 4 5 6 14 15 16 17 18 19



10765267Amend2

chain bonds :

5-8 8-9 9-10 9-11 10-14 15-21 16-22 17-24 18-25 19-26

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-8 8-9 9-10 9-11 10-14 15-21 16-22 17-24
18-25 19-26

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19

G1:C,O,N,P

G2:O,S,N

G3:O,S

G4:H,NO2,X

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS 9:CLASS 10:CLASS

11:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 21:CLASS 22:CLASS

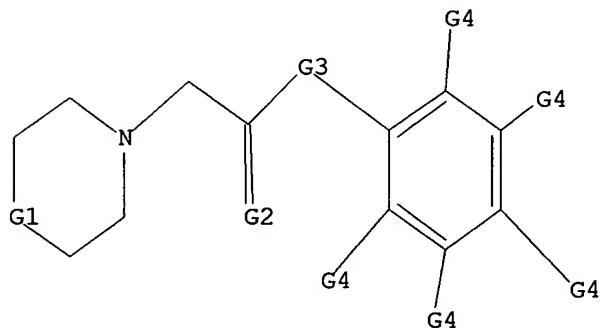
24:CLASS 25:CLASS 26:CLASS

L2 STRUCTURE UPLOADED

=> d 12

L2 HAS NO ANSWERS

L2 STR



G1 C,O,N,P

G2 O,S,N

G3 O,S

G4 H,NO2,X

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 15:32:55 FILE 'REGISTRY'

10765267Amend2

SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 44 TO 476
PROJECTED ANSWERS: 2 TO 124

L3 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 15:33:05 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 281 TO ITERATE

100.0% PROCESSED 281 ITERATIONS 33 ANSWERS
SEARCH TIME: 00.00.01

L4 33 SEA SSS FUL L1

=> s l2

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SAMPLE SCREEN SEARCH COMPLETED - 4657 TO ITERATE

42.9% PROCESSED 2000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 89048 TO 97232
PROJECTED ANSWERS: 1 TO 137

L5 1 SEA SSS SAM L2

=> s l2 full

FULL SEARCH INITIATED 15:33:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 93042 TO ITERATE

100.0% PROCESSED 93042 ITERATIONS 152 ANSWERS
SEARCH TIME: 00.00.01

L6 152 SEA SSS FUL L2

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	335.20	335.41

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FILE 'REGISTRY' ENTERED AT 15:30:37 ON 06 SEP 2006

L1	STRUCTURE UPLOADED
L2	STRUCTURE UPLOADED
L3	2 S L1
L4	33 S L1 FULL
L5	1 S L2
L6	152 S L2 FULL

FILE 'CAPLUS' ENTERED AT 15:33:21 ON 06 SEP 2006

=> s 14

L7	21 L4
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=> s 16

L8	52 L6
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=> s 14 not 16

	21 L4
	52 L6
L9	15 L4 NOT L6

=> d ed abs ibib hitstr 1-15

L9 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 16 May 2005

AB Glycerophosphoethanolamine (GPEtn) and glycerophosphoserine (GPser) lipids were reacted with a multiplexed set of differentially isotopically enriched N-methylpiperazine acetic acid N-hydroxysuccinimide ester reagents, which place isobaric mass labels at a primary amino group. The resulting derivitized aminophospholipids were isobaric and chromatog. indistinguishable but yielded pos. reporter ions (m/z 114 or 117) after collisional activation that could be used to identify and quantify individual members of the multiplex set. The chromatog. and mass spectrometric response of N-methylpiperazine amide-tagged aminophospholipids was probed using glycerophosphoethanolamine and glycerophosphoserine lipid stds. The [M+H]⁺ of each tagged aminophospholipid shifted 144 Da, and during collision-induced dissociation the major fragmentation ion was either m/z 114 or 117. This mode of detecting aminophospholipids was useful for an unbiased anal. of plasmalogen GPEtn lipids. Mol. species information on the esterified fatty acyl substituents was obtained by collisional activation of the [M-H]⁻ ions. The isotope-tagged reagents were used to assess changes in the distribution of GPEtn lipids after exposure of liposomes made from phospholipids extracted from RAW 264.7 cells to Cu₂/H₂O₂ to illustrate the ability of these reagents to aid in the mass spectrometric identification of aminophospholipid changes that occur during biol. stimuli.

ACCESSION NUMBER: 2005:412987 CAPLUS

DOCUMENT NUMBER: 144:106804

TITLE: Analysis of cell membrane aminophospholipids as isotope-tagged derivatives

AUTHOR(S): Zemski Berry, Karin A.; Murphy, Robert C.

CORPORATE SOURCE: Department of Pharmacology, University of Colorado

HEALTH SCIENCES CENTER, AURORA, CO, 80045, USA

SOURCE: Journal of Lipid Research (2005), 46(5), 1038-1046

CODEN: JLPRAW; ISSN: 0022-2275

PUBLISHER: American Society for Biochemistry and Molecular

BIOLOGY, INC.

DOCUMENT TYPE: Journal

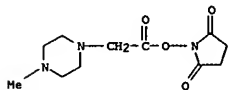
LANGUAGE: English

IT 856188-06-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and mass spectrometric anal. of cell membrane
aminophospholipids as isotope-tagged derivs.)

RN 856188-06-2 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 08 Oct 2004

AB Provided is a method for characterizing a mol. by mass spectrometry, which mol. comprises one or more free amino groups, which method comprises: (a) reacting one or more free amino groups in the mol. with a mass tag reagent comprising a reactive functionality capable of reacting with an amino group, and a tertiary amino group linked to the reactive functionality; and (b) characterizing the mol. by mass spectrometry.

ACCESSION NUMBER: 2004:824132 CAPLUS

DOCUMENT NUMBER: 141:310231

TITLE: Mass labels

INVENTOR(S): Hamon, Christian; Kuhn, Karsten; Thompson, Andrew;

Reuschling, Dieter; Schaefer, Juergen

PATENT ASSIGNEE(S): Xzillion G.m.b.H. & Co. K.-G., Germany; Proteome

SCIENCES PLC

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004086050	A3	20041229		
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RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, HR, HS, HN, TD, TG			
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CA 2520297	AA	20041007	CA 2004-2520297	20040318
EP 1606623	A2	20051221	EP 2004-721565	20040318
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
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PRIORITY APPLN. INFO.:			GB 2003-6756	A 20030324
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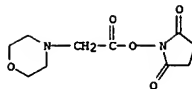
IT 741683-76-1P 741683-79-4P 768385-34-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(mass labels)

RN 741683-76-1 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-morpholinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

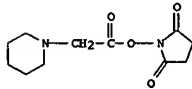
L9 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



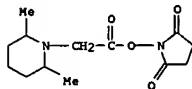
RN 741683-79-4 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(1-piperidinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



RN 768385-34-8 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(2,6-dimethyl-1-piperidinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



L9 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 20 Aug 2004

AB This invention pertains to methods, mixes., kits and/or compns. for the determination of analytes by mass anal. using unique labeling reagents or sets of unique labeling reagents. The labeling reagents can be isomeric or isobaric and can be used to produce mixes. suitable for multiplex anal. of the labeled analytes.

ACCESSION NUMBER: 2004:681717 CAPLUS

DOCUMENT NUMBER: 141:202794

TITLE: Methods, mixtures, kits and compositions pertaining to analyte determination

INVENTOR(S): Pappin, Darryl J. C.; Bartlett-Jones, Michael

PATENT ASSIGNEE(S): Applera Corporation, USA

SOURCE: PCT Int. Appl., 105 pp.

CODEN: FIXXDZ

DOCUMENT TYPE: Patent

LANGUAGE: English

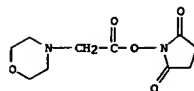
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004070352	A2	20040819	WO 2004-US2077	20040127
W:	AZ, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BV, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LX, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NG, NH, NL, NO, NZ, OM, OS, PA, PE, PG, PH, PK, PL, PT, PY, RE, RO, RU, RW, SA, SD, SE, SG, SI, SK, SL, SM, SN, SR, SS, ST, SV, SZ, TD, TG, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VE, VG, VI, VN, YD, YU, ZA, ZM, ZW			
RV:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004209401	A1	20040819	AU 2004-209401	20040127
CA 2488584	AA	20040819	CA 2004-2488584	20040127
US 2004219685	A1	20041104	US 2004-765264	20040127
US 2004220412	A1	20041104	US 2004-765267	20040127
US 2004219686	A1	20041104	US 2004-765498	20040127
EP 1588145	A2	20051026	EP 2004-705571	20040127
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, HK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 2006105416	A1	20060518	US 2005-319685	20051228
PRIORITY APPLN. INFO.:			US 2003-443612P	P 20030130
			US 2004-765267	A1 20040127
			WO 2004-US2077	W 20040127

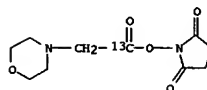
IT 741683-76-1P 741683-77-2P 741683-78-3P
 741683-79-4P 741683-80-7P 741683-86-3P
 741683-93-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (methods, mixes., kits and compns. pertaining to analyte determination)
 RN 741683-76-1 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)

L9 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



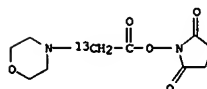
RN 741683-77-2 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)-1-13C]oxy- (9CI) (CA INDEX NAME)



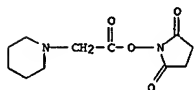
RN 741683-78-3 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)-2-13C]oxy- (9CI) (CA INDEX NAME)



RN 741683-79-4 CAPLUS

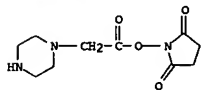
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 741683-80-7 CAPLUS

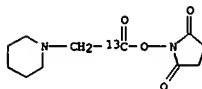
CN 2,5-Pyrrolidinedione, 1-[(1-piperazinylacetyl)oxy]- (9CI) (CA INDEX NAME)

L9 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



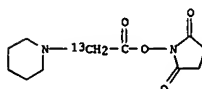
RN 741683-86-3 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)-1-13C]oxy- (9CI) (CA INDEX NAME)



RN 741683-93-2 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)-2-13C]oxy- (9CI) (CA INDEX NAME)



L9 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 17 May 2004

AB The process comprises N-alkylating swainsonine with bromoacetic acid N-succinimido ester in acetone under refluxing, coupling with bovine serum albumin in water at 0 °C, dialyzing, freeze drying, and emulsifying with Freund's adjuvant.

ACCESSION NUMBER: 2004:399339 CAPLUS

DOCUMENT NUMBER: 141:254556

TITLE: Grassland's locoweed toxin vaccine

INVENTOR(S): Dong, Dewen; Cao, Guangrong; Zhao, Baoyu; Ge, Pengbin

PATENT ASSIGNEE(S): Danong Biotechnology Co., Ltd., Yangling, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.

CODEN: CNXKEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1395967	A	20030212	CN 2002-114592	20020524
PRIORITY APPLN. INFO.:			CN 2002-114592	20020524

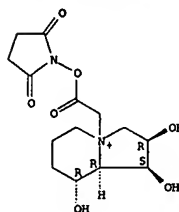
IT 754196-04-8P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (vaccine for Grassland's locoweed toxin)

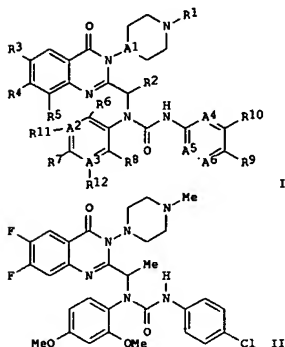
RN 754196-04-8 CAPLUS

CN Indolizinium, 4-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]octahydro-1,2,8-trihydroxy-, bromide, (1S,2R,8R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● Br⁻

L9 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 28 Nov 2003
GI

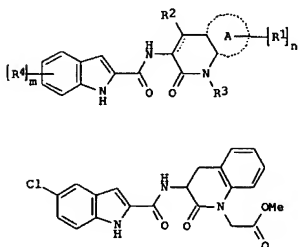


AB This invention relates to compds. of formula I [A1-A6 = C, N; R1 = H, alkyl, cycloalkyl, CH2-cycloalkyl, etc.; R2 = alkyl; R3-R12 = H, alkyl, CF3, alkoxy, halo, OH, CN, etc.] that are efflux pump inhibitors and therefore are useful as potentiators of anti-fungal agents for the treatment of infections caused by fungi that employ an efflux pump resistance mechanism. Thus, II was prepared and showed a reduced MIC value against *Candida albicans* in the presence of fluconazole.

ACCESSION NUMBER: 2003:930975 CAPLUS
DOCUMENT NUMBER: 139:395945
TITLE: Preparation of quinazolinylmethyl urea derivatives as fungal efflux pump inhibitors
INVENTOR(S): Watkins, Will J.; Lemoine, Remy; Cho, Aesop; Palme, Monica
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 109 pp., Cont.-in-part of U.S. Ser. No. 906,864.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074513	A2	20030912	WO 2003-GB893	20030304
WO 2003074513	A3	20031231		

L9 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 14 Sep 2003
GI



AB The title compds. [I; A = phenylene or heteroarylene; m = 0-2; n = 0-2; R1 = halo, NO2, CN, OH, CO2H, etc.; R2 = H, OH, CO2H; R3 = H, OH, acyl, heterocyclyl, etc.; R4 = H, halo, NO2, CN, etc.] which possess glycogen phosphorylase inhibitory activity and accordingly have value in the treatment of disease states associated with increased glycogen phosphorylase activity such as diabetes type II, were prepared. Thus, amidation of 5-chloro-1H-indole-2-carboxylic acid with Me 2-(3-amino-2-oxo-3,4-dihydroquinolin-1-(2H)-yl)acetate (preparation given) in the presence of HOBT,

DCM and EDCI afforded 591 II. The compds. I showed IC50 values in the range 100nM to 1nM against against hrl glycogen phosphorylase a. Pharmaceutical composition comprising the compound I was claimed.

ACCESSION NUMBER: 2003:719471 CAPLUS
DOCUMENT NUMBER: 139:261174
TITLE: Preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors
INVENTOR(S): Birch, Alan Martin; Morley, Andrew David
PATENT ASSIGNEE(S): AstraZeneca AB, Sued.; AstraZeneca UK Limited
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXX02
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074513	A2	20030912	WO 2003-GB893	20030304
WO 2003074513	A3	20031231		

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TH, TN, TR, TT, TZ,

L9 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

US 2003220338	A1	20031127	US 2002-243074	20020912
US 6596723	B1	20030722	US 2001-906864	20010716
US 2003229097	A1	20031211	US 2002-334755	20021230
US 6689782	B2	20040210		
WO 2004024140	A1	20040325	WO 2003-US5184	20030221

AU 2003215343 A1 20040430 AU 2003-215343 20030221

PRIORITY APPLN. INFO.:

US 2001-906864	A2	20010716
US 2002-243074	A2	20020912
US 2002-334755	A	20021230
WO 2003-US5184	W	20030221

OTHER SOURCE(S):

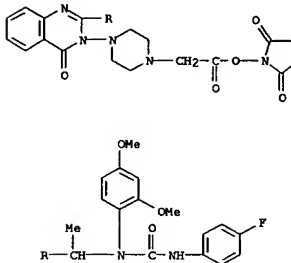
MARPAT 139:395945

IT 626245-55-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of quinazolinylmethyl urea derivs. as fungal efflux pump inhibitors)

RN 626245-59-8 CAPLUS

CN Urea, N-(2,4-dimethoxyphenyl)-N-[1-[3-[4-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1-piperazinyl]-3,4-dihydro-4-oxo-2-quinazolinyl]ethyl]-N'-(4-fluorophenyl)- (9CI) (CA INDEX NAME)



L9 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

US 2003220338	A1	20031127	US 2002-243074	20020912
US 6596723	B1	20030722	US 2001-906864	20010716
US 2003229097	A1	20031211	US 2002-334755	20021230
US 6689782	B2	20040210		
WO 2004024140	A1	20040325	WO 2003-US5184	20030221

AU 2003215343 A1 20040430 AU 2003-215343 20030221

PRIORITY APPLN. INFO.:

US 2001-906864	A2	20010716
US 2002-243074	A2	20020912
US 2002-334755	A	20021230
WO 2003-US5184	W	20030221

OTHER SOURCE(S):

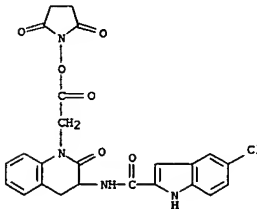
MARPAT 139:261174

IT 599193-13-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)

RN 599193-13-2 CAPLUS

CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 01 Dec 1999

AB A simple and sensitive LC method that rapidly labels amino compds. including amino acids, using acridine-9-N-acetyl-N-hydroxysuccinimide (AAHS) which was synthesized by the reaction of acridine-9-N-acetic acid with benzenedisulfonyl-N-hydroxysuccinimide, was developed. A mixture of amines is treated with AAHS in the presence of triethylamine in non-aqueous acetonitrile or in 0.2 mol l⁻¹ borate buffer at pH 8.0-9.0 in 40% volume/volume acetonitrile solution to give quant. yields of amides. The emission maximum for the derivatized amines is 435 nm (λ_{ex} = 404 nm). The labeled derivs. are very stable; no significant decomposition is observed

after heating in 50% acetonitrile at 40° for 24 h. Studies on the derivatization conditions indicate that amines or amino acids react very rapidly with AAHS under the proposed conditions. The method, in conjunction with a multi-step gradient, offers baseline resolution of common amine or amino acid derivs. on a reversed-phase C18 column. This method is more convenient and more efficient than previous methods which require prior conversion of carboxylic acids to acyl chlorides, which are unstable to moisture. The LC separation of amine or amino acid derivs. has good reproducibility. The established method is also suitable for the

determination of other amine compds. in various biol. fluids.

ACCESSION NUMBER: 1999:759500 CAPLUS

DOCUMENT NUMBER: 132:148595

TITLE: Characterization and application of acridine-9-N-acetyl-N-hydroxysuccinimide as a pre-column derivatization agent for fluorimetric detection of amino acids in liquid chromatography
AUTHOR(S): You, Jinmao; Lao, Wenjian; You, Jing; Wang, Guojun
CORPORATE SOURCE: Lanzhou Inst. Chem. Phys., Chinese Academy of Sciences, Lanzhou, 730000, Peop. Rep. China
SOURCE: Analyst (Cambridge, United Kingdom) (1999), 124(12), 1755-1760

CODEN: ANALAO; ISSN: 0003-2654

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 150321-96-3P

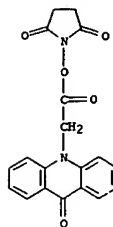
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(characterization and application of acridine-9-N-acetyl-N-hydroxysuccinimide as a pre-column derivatization agent for fluorimetric detection of amino acids in liquid chromatog.)

RN 150321-96-3 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[(9-oxo-10(9H)-acridinyl)acetyl]oxy)- (9CI) (CA INDEX NAME)

L9 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 26 Mar 1996

AB The synthesis of 10,10'-substituted-9,9'-bisacridine mols. and their derivs. is disclosed. These mols. catalyze the production of light by chemiluminescence in the presence of a signal solution having a pH from about 10.0 to about 14.0, at a concentration effective for producing a chemiluminescent signal, a chelating agent, a sulfonate, a reducing sugar, and oxidant or combination of oxidants, an alc. and aqueous sodium tetraborate. These 10,10'-substituted-9,9'-bisacridines are used alone or attached to haptens or macromols. and are utilized as labels in the preparation

of chemiluminescent, homogeneous or heterogeneous assays. They are also used in conjunction with other chemiluminescent label mols. to produce multiple analyte chemiluminescent assays. An assay demonstrating the linearity of the signal with increasing dilns. of an anti-TSH-10,10'-para-toluo-9,9'-bisacridine conjugate is described.

ACCESSION NUMBER: 1996:171671 CAPLUS

DOCUMENT NUMBER: 124:225820

TITLE: Preparation of derivatized 10,10'-substituted-9,9'-bisacridine luminescent molecules and signal solutions
INVENTOR(S): Katsilometas, George W.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9600392	A1	19960104	WO 1995-US7966	19950622
W: CN, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 766825	A1	19970409	EP 1995-924671	19950622
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1155931	A	19970730	CN 1995-194681	19950622
JP 10502346	T2	19980303	JP 1995-503340	19950622
US 5866335	A	19990202	US 1996-767288	19961216
HK 1001416	A1	20050826	HK 1998-100291	19980114
PRIORITY APPLN. INFO.:			US 1994-265481	A 19940624
			WO 1995-US7966	W 19950622

IT 174569-85-8

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (preparation of bisacridine luminescent derivs. and signal solns.)

RN 174569-85-8 CAPLUS

CN 9,9'-Bisacridinium, 10,10-bis[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-, dinitrate (9CI) (CA INDEX NAME)

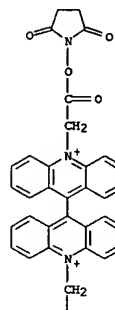
CH 1

CRN 174569-84-7

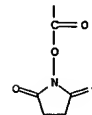
CMF C38 H28 N4 O8

L9 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



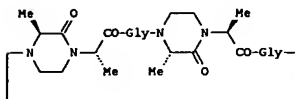
CH 2

CRN 14797-55-8

CMF N O3



L9 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 21 Mar 1995
GI



I

AB The crystal structure of 18-membered cyclic pseudopeptide I, containing N,N'-ethylene-bridged-(S)-alanyl-(S)-alanine and glycine was determined by x-ray crystallog. Moreover, the structure of this pseudopeptide was examined by ¹H NMR measurement in CD₃CN, and by mol. mechanics calcns.

ACCESSION NUMBER: 1995:427460 CAPLUS

DOCUMENT NUMBER: 123:83982

TITLE: Structure of cyclic hexa-pseudopeptide constructed from N,N'-ethylene-bridged-(S)-alanyl-(S)-alanine and glycine

AUTHOR(S): Kojima, Yoshitane; Yamashita, Tetsushi; Miyake, Hiroyuki

CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan

SOURCE: Chemistry Letters (1995), (3), 201-2

CODEN: CHLTAG; ISSN: 0366-7022

PUBLISHER: Nippon Kagakai

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 164857-03-8

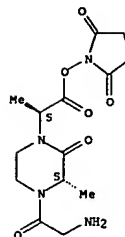
RL: RCT (Reactant); RACT (Reactant or reagent)
(structure of cyclic hexapseudopeptide constructed from ethylene-bridged alanylalanine and glycine)

RN 164857-03-8 CAPLUS

CN Piperazinone, 4-(aminoacetyl)-1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-1-methyl-2-oxoethyl]-3-methyl-, monohydrochloride, [5-(R*,R*)]- (9CI) (CA INDEX NAME)

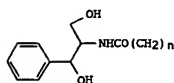
Absolute stereochemistry.

L9 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

L9 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 23 Jul 1994
GI



I

AB Fluorescent compds. useful in the determination of chloramphenicol acetyltransferase (CAT) enzyme activity are described. The compds. BASE-Ns-X are fluorescent derivs. related in structure to chloramphenicol comprising a base (I), substituted at one to five aromatic ring positions by substituents, which may be the same or different, that are alkyl, hydroxy, alkoxy, aryl, halo, nitro, amino, alkylamido, or acylamido, and 0 < n < 6; and a fluorescent moiety X (nonreduced tricyclic difluoroboradiazaindacene fluorophore) linked to the terminal CH₂ of BASE through a linker Ns (e.g., NHX, NHCOCH₂X). The substrate compds. are acylated in the presence of CAT to produce fluorescent mono- and diacylated products, which are then phys. separated from the reaction mixture

and quantitated by means of their fluorescence and/or absorbance. Fluorescent mols. conjugated to chloramphenicol include derivs. of fluorescein, rhodamine, coumarin, dimethylaminonaphthalenesulfonic acid (dansyl), pyrene, anthracene, nitrobenzoxadiazole (NBD), acridine and dipyrrometheneboron difluoride.

ACCESSION NUMBER: 1994:435864 CAPLUS

DOCUMENT NUMBER: 121:35864

TITLE: Fluorescent chloramphenicol derivatives for determination of chloramphenicol acetyltransferase activity

INVENTOR(S): Haughland, Richard P.; Kang, Hee C.; Young, Steven L.; Melner, Michael H.

PATENT ASSIGNEE(S): Molecular Probes, Inc., USA

SOURCE: U.S., 13 pp. Cont. of U.S. Ser. No. 321,494,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5262545	A	19931116	US 1991-722352	19910618
US 5364764	A	19941115	US 1992-994992	19921221
PRIORITY APPLN. INFO.:			US 1989-321494	B1 19890309
			US 1991-722352	A3 19910618

OTHER SOURCE(S): MARPAT 121:35864

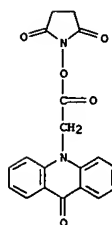
IT 150321-96-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(fluorescent chloramphenicol derivs. for determination of chloramphenicol acetyltransferase activity)

RN 150321-96-3 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[9-oxo-10(9H)-acridinyl]acetyl]oxy]- (9CI) (CA

L9 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)



L9 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 05 Mar 1994

AB A photoluminometric immunoassay comprises reacting 2 immunoreactants, 1 labeled with a photoluminescent energy transfer donor capable of photoluminescence and the other labeled with a photoluminescent energy transfer acceptor complementary to the donor: exciting the sample with radiation; and calculating the apparent luminescence lifetime to determine

the presence of a reaction product. Studies were done using goat anti-mouse IgG labeled with the donor dichlorotriazinylaminofluorescein and mouse IgG labeled with the acceptor tetramethylrhodamine isothiocyanate.

ACCESSION NUMBER: 1994:101282 CAPLUS

DOCUMENT NUMBER: 120:101282

TITLE: Fluorescent energy transfer immunoassay

INVENTOR(S): Lakowicz, Joseph; Maliwal, Badri; Thompson, Richard; Ozinskas, Alvydas

PATENT ASSIGNEE(S): University of Maryland, USA

SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPOXDM

DOCUMENT TYPE: Patent

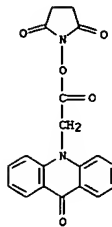
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 552108	A2	19930721	EP 1993-400091	19930115
EP 552108	A3	19930922		
R: DE, FR, GB, IT				
CA 2087413	AA	19930718	CA 1993-2087413	19930115
JP 06066802	A2	19940311	JP 1993-6057	19930118
JP 3325939	B2	20020917		
US 5631169	A	19970520	US 1994-183238	19940119
PRIORITY APPLN. INFO.:			US 1992-822233	A 19920117
IT 150321-96-3D, conjugates with immunoreactant				
RL: ANST (Analytical study)				
(in photoluminometric immunoassay)				
RN 150321-96-3 CAPLUS				
CN 2,5-Pyrrolidinedione, 1-[[[9-oxo-10(9H)-acridinyl]acetyl]oxy]- (9CI) (CA INDEX NAME)				

L9 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L9 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 01 Nov 1992

AB Metmyoglobin covalently linked with viologen was prepared and reduced by dithionite ions faster than the native metmyoglobin, suggesting that the reduction by dithionite of the attached viologen was followed by a rapid intramol. electron transfer from the viologen radical cation to the heme iron center.

ACCESSION NUMBER: 1992:566123 CAPLUS

DOCUMENT NUMBER: 117:166123

TITLE: Effect of the chemical modification by viologen on the reduction of metmyoglobin

AUTHOR(S): Tsukahara, Keiichi; Todorobaru, Hiromi

CORPORATE SOURCE: Fac. Sci., Nara Women's Univ., Nara, 630, Japan

SOURCE: Chemistry Letters (1992), (7), 1181-4

CODEN: CNLTAG; ISSN: 0366-7022

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 143674-76-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and coupling of, with metmyoglobin)

RN 143674-76-4 CAPLUS

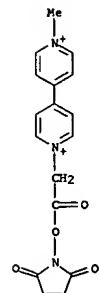
CN 4,4'-Bipyridinium, 1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1'-methyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 143674-75-3

CMF C17 H17 N3 O4

L9 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

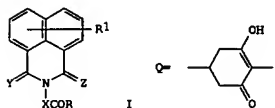


CM 2

CRN 14797-73-0

CMF C1 O4

L9 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 05 Oct 1991
GI

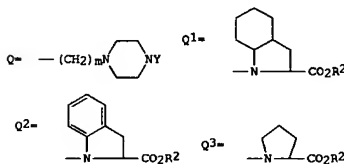


AB The title compds. [I; R = ON:CR5R6; R1 = 1-4 substituents which may be the same or different selected from H, halo, cyano, (halo)alkyl, etc.; R5 = H, cyano, alkyl, alkenyl, etc.; R6 = H, cyano, (halo)alkyl, alkoxy, etc.; X = (un)substituted alkylene; Y, Z = O, S] were prepared as safeners for 2-[(hetero)aryloxyphenoxyl]acetate and -propionate or alkoximinomethylenecyclohexenone herbicides. Thus, I (R1 = H, X = CH2, Y = Z = O) (II); R = Cl) (preparation given) was condensed with Me2C:NOH to give II (R = ON:CHMe2). II [R = ON:CR5R6; R5R6 = (CH2)3CH:C(OEt)] reduced damage to wheat of 0.03 kg/ha of the herbicide EtSCHMEH221C(4:1NOEt)Pr (Z1 = hydroxycyclohexenonylene group Q) from 70 to 10% (with 95% control of annual ryegrass) at 0.125 kg/ha.

ACCESSION NUMBER: 1991:535937 CAPLUS
DOCUMENT NUMBER: 115:135937
TITLE: Preparation of N-[[[(alkylideneimino)oxycarbonyl]alkyl]-1,6-naphthalenedicarboximides and analogs as herbicide safeners
INVENTOR(S): Saupe, Thomas; Meyer, Norbert; Plath, Peter; Schirmer, Ulrich; Wuerzler, Bruno; Westphalen, Karl Otto; Patsch, Manfred; Pfister, Juergen
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Eur. Pat. Appl., 45 pp.
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 430004	A2	19910605	EP 1990-122030	19901117
EP 430004	A3	19911218		
DE 3939379	A1	19910606	DE 1989-3939379	19891129
DE 4021654	A1	19920109	DE 1990-4021654	19900707
CA 2030129	AA	19910530	CA 1990-2030129	19901116
US 5076831	A	19911231	US 1990-615865	19901120
JP 03190861	A2	19910820	JP 1990-323392	19901128
PRIORITY APPLN. INFO.:			DE 1989-3939379	A 19891129
			DE 1990-4021654	A 19900707

L9 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 06 Jan 1990
GI

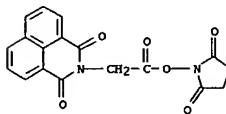


AB RR1CHCONHCH(CO2R2) (CH2)2COR3 [I; R = H, lower alkyl, PhCH2; R1 = (NH)m(CH2)nW, Q; R2 = H, lower alkyl; R3 = Q1, Q2, Q3, NR4CHR2CO2R2; W = H, CO2H, NH2, OH; Y = H, lower alkyl, Ph, PhCH2; R4 = C4-8 cycloalkyl, halo, alkoxy, (OH-substituted) Ph; m = 0, 1; n = 0-4] and their salts are prepared. Refluxing 28 g 2-(S)-bromopropionic acid with 42 g PhCH2OH in PhMe gave 17.0 g benzyl 2-(S)-bromopropionate, 2.2 g of which was stirred with 1.6 g 1-benzylpiperazine in MeCN, then hydrolyzed with aqueous NaOH to give 1.0 g 2-(R)-(4-benzylpiperazinyl)propionic acid (II). Then, 24.5 g N-benzylloxycarbonyl-O1-ethyl-D-glutamic acid was stirred with 17.5 g Et (2S, 3aS, 7aS)-octahydro-1H-indole-2-carboxylate-HCl in CH2Cl2, then reduced, and then hydrolyzed with aqueous NaOH to give 15.01 g (2S, 3aS, 7aS)-1-(γ-D-glutamyl)octahydro-1H-indole-2-carboxylic acid (III). Then, 0.8 g II was treated with 0.4 g N-hydroxysuccinimide in CHCl3 to give 2-(R)-(4-benzylpiperazinyl)propionic acid N-hydroxysuccinimide ester, which was treated with 1.0 g III in THF to give 0.8 g (2S, 3aS, 7aS)-1-[N-2(R)-(4-benzylpiperazinyl)propionyl]-γ-D-glutamyl]octahydro-1H-indole-2-carboxylic acid, 0.4 g of which was refluxed with HCO2H in MeOH in the presence of Pd black for 4 h to give 0.2 g (2S, 3aS, 7aS)-1-[N-(2R)-piperazinylpropionyl]-γ-D-glutamyl]octahydro-1H-indole-2-carboxylic acid, which showed an IC50 of 2.1 × 10⁻⁷ M against angiotensin converting enzyme.

ACCESSION NUMBER: 1990:7937 CAPLUS
DOCUMENT NUMBER: 112:7937
TITLE: Preparation and testing of tripeptide derivatives as cardiovascular agents
INVENTOR(S): Sawayama, Tadahiyo; Nishimura, Kazuya; Deguchi, Takashi
PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

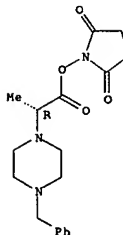
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01125357	A2	19890517	JP 1987-281873	19871106

L9 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
OTHER SOURCE(S): MARPAT 115:135937
IT 135980-49-3P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as herbicide safener)
RN 135980-49-3 CAPLUS
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

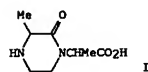


L9 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
PRIORITY APPLN. INFO.: JP 1987-281873 19871106
OTHER SOURCE(S): MARPAT 112:7937
IT 124078-64-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and condensation of, with (glutamyl)indolecarboxylic acid)
RN 124078-64-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[1-oxo-2-[4-(phenylmethyl)-1-piperazinyl]propoxy]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



4.9 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 22 Jul 1988
 GI



AB Synthetic routes to cyclic peptides cyclo(Sar-EAA)4 (EAA = residue of title acid I) and cyclo(Sar-Sar-Sar-EAA)2 are described. Interaction of these cyclic peptides with p-toluenesulfonic acid salt of sodium, benzylamine, and 4-phenylbutylamine were studied by ¹H NMR.

ACCESSION NUMBER: 1988:423356 CAPLUS

DOCUMENT NUMBER: 109:23356

TITLE: Interactions of organic substrates with 30- and 36-membered ring peptides containing (2S,3'S)-2-(2'-oxo-3'-methylpiperazin-1'-yl)propanoic acid and sarcosine

AUTHOR(S): Kojima, Yoshitane; Yamashita, Tetsushi; Shibata, Kozo; Ohsuka, Akio

CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan

SOURCE: Polymer Journal (Tokyo, Japan) (1987), 19(10), 1221-3

CODEN: POLJ88; ISSN: 0032-3896

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 114967-10-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of)

RN 114967-10-1 CAPLUS

CN 1-Piperazineacetamide, N-[2-[4-[2-[[2-[4-[2-[[2,5-dioxo-1-pyrrolidinyl]oxy]-1-methyl-2-oxoethyl]-2-methyl-3-oxo-1-piperazinyl]-2-oxoethyl]methylamino]-1-methyl-2-oxoethyl]-2-methyl-3-oxo-1-piperazinyl]-2-oxoethyl]-N,α,3-trimethyl-4-[[methyl[2-[3-methyl-4-[[methylamino]acetyl]-2-oxo-1-piperazinyl]-1-oxopropyl]amino]acetyl]-2-oxo-, [3S-[1[R* [R* [R* [R* (R*)]]]]], 3R*, 4[R* (R*)]]]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

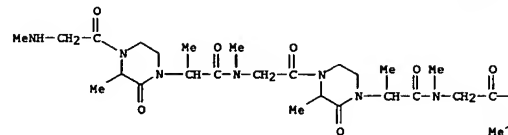
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CRN 114967-09-8

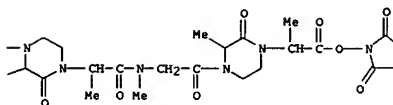
CMF C48 H73 N13 O15

L9 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



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L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

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L4 33 S L1 FULL

L5 1 S L2

L6 152 S L2 FULL

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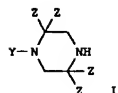
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L8 52 S L6

L9 15 S L4 NOT L6

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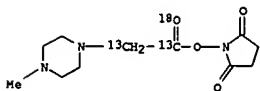
L7 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
G1



AB Isotopically enriched N-substituted piperazines (I) or salts thereof, comprising one or more heavy atom isotopes (Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or fluorine atoms; Z = independently H, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H or F atoms, a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms), or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms); wherein the N-methylpiperazine is isotopically enriched with either of ¹³C and/or ¹⁵N are prepared. N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like (no data). Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-¹³C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-¹³C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-¹³C.

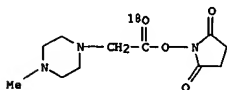
ACCESSION NUMBER: 2005:592130 CAPLUS
DOCUMENT NUMBER: 143:115574
TITLE: Preparation of isotopically enriched N-substituted piperazines
INVENTOR(S): Pappin, Darryl J. C.; Pillai, Sasi; Coull, James M.
PATENT ASSIGNEE(S): Applera Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 29 pp.
CODEN: USXXCO

L7 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(Reactant or reagent)
(prepn. of isotopically enriched N-substituted piperazines as isobaric labeling reagents)
RN 856188-16-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-¹³C2-¹⁸O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)

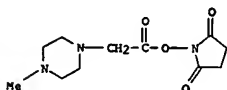


●2 HCl

IT 856187-87-6P 856188-06-2P 857027-09-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)
RN 856187-87-6 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-¹⁸O]oxy]- (9CI) (CA INDEX NAME)



RN 856188-06-2 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



RN 857027-09-9 CAPLUS
CN 2-Pyrrolidinone, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

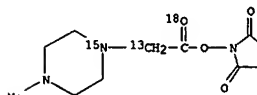
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148773	A1	20050707	US 2004-751388	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

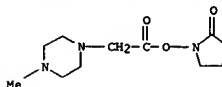
OTHER SOURCE(S): MARPAT 143:115574
IT 856188-20-0P
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)
RN 856188-20-0 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl-1-¹⁵N)acetyl-2-¹³C-¹⁸O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



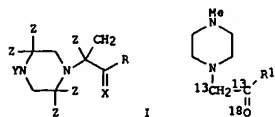
●2 HCl

IT 856188-16-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L7 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L7 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
G1



AB In some embodiments, this invention pertains to active esters of N-substituted piperazine acetic acid I (R = leaving group; X = O, S; Y = Cl-C6 alkyl, Cl-C6 alkyl ether; Z = H, ZH, F, Cl, Br, iodide, amino acid side chain, Cl-C6 alkyl, Cl-C6 alkyl ether), including isotopically enriched versions thereof. In some embodiments, this invention pertains to methods for the preparation of active esters of N-substituted piperazine acetic acid, including isotopically enriched versions thereof. For example, the isotopically labeled N-methylpiperazine II (R1 = 18OH) reacted with the trifluoroacetic acid ester of N-hydroxysuccinimide to give the succinate II (R1 = OR2, R2 = succinimido).

ACCESSION NUMBER: 2005:592129 CAPLUS

DOCUMENT NUMBER: 143:97398

TITLE: Preparation of active esters of N-substituted piperazine acetic acids, including isotopically enriched versions

INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.

PATENT ASSIGNEE(S): Applera Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 33 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

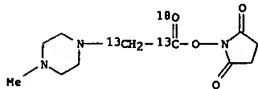
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148771	A1	20050707	US 2004-751354	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW

RW: BV, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,

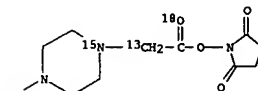
GAP

L7 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



●2 HCl

RN 856188-20-0 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)-1-15N]acetyl-2-13C-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

L7 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:97398

IT 856187-87-6P 856188-06-2P 856188-16-4P

856188-20-0P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(Preparation)

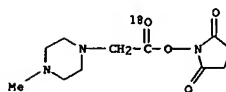
(preparation of active esters of N-substituted piperazine acetic acids

and

their labeled deriva.)

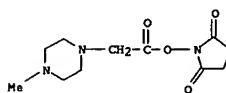
RN 856187-87-6 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)



RN 856188-06-2 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



RN 856188-16-4 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 08 Jul 2005

AB This invention pertains to mixts. of isobarically labeled analytes and fragment ions thereof.

ACCESSION NUMBER: 2005:592027 CAPLUS

DOCUMENT NUMBER: 143:93642

TITLE: Mixtures of isobarically labeled analytes and

fragments ions derived therefrom

INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.

PATENT ASSIGNEE(S): Applera Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 751,353.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005147985	A1	20050707	US 2004-822639	20040412
US 2005147982	A1	20050707	US 2004-751353	20040105
US 2005148007	A1	20050707	US 2004-852730	20040524
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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RW: BV, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZH, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2004-751353 A2 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A2 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:93642

IT 856188-06-2P 857027-09-9P

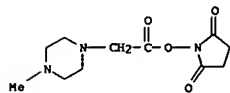
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(mixts. of isobarically labeled analytes and fragments ions derived therefrom)

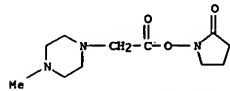
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CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

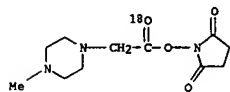
L7 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 857027-09-9 CAPLUS
CN 2-Pyrrolidinone, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

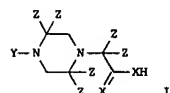


IT 856187-87-6P 856188-16-4P 856188-20-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(mixts. of isobarically labeled analytes and fragments ions derived therefrom)
RN 856187-87-6 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)



RN 856188-16-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
GI

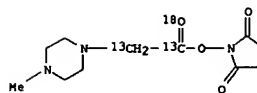


AB Isotopically enriched N-substituted piperazine-1-acetic acids (I) or salts thereof, comprising one or more heavy atom isotopes [X = O, S, Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or F atoms; Z = independently H, deuterium, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms, or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms)] are prepared N-substituted piperazine can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like. Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

ACCESSION NUMBER: 2005:588426 CAPLUS
DOCUMENT NUMBER: 143:115568
TITLE: Preparation of isotopically enriched N-substituted piperazine-1-acetic acids
INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. c.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.
PATENT ASSIGNEE(S): Applera Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 29 pp.
CODEN: USXQCO
DOCUMENT TYPE: Patent
LANGUAGE: English

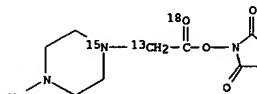
Page 1906/09/2006

L7 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



●2 HCl

RN 856188-20-0 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl-15N)acetyl-2-13C-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

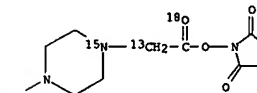
L7 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148774	A1	20050707	US 2004-751387	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SE, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

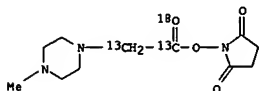
OTHER SOURCE(S): MARPAT 143:115568
IT 856188-20-0P
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 856188-20-0 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl-15N)acetyl-2-13C-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

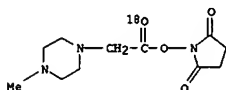
IT 856188-16-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 856188-16-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)

*L7 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

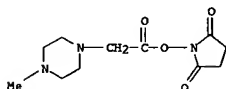


●2 HCl

IT 856187-87-6P 856188-06-2P 857027-09-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
 RN 856187-87-6 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)



RN 856188-06-2 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



RN 857027-09-9 CAPLUS
 CN 2-Pyrrolidinone, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 08 Jul 2005
 AB This invention pertains to isobarically labeled analytes and fragment ions thereof.

ACCESSION NUMBER: 2005:588349 CAPLUS
 DOCUMENT NUMBER: 143:112150
 TITLE: Isobarically labeled analytes and fragment ions derived therefrom
 INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.
 PATENT ASSIGNEE(S): Applera Corporation, USA
 SOURCE: U.S. Pat. Appl. Publ., 88 pp., Cont.-in-part of U.S. Ser. No. 822,639.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

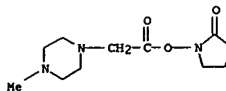
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US 2005148087	A1	20050707	US 2004-852730	20040524
US 2005147982	A1	20050707	US 2004-751353	20040105
US 2005147985	A1	20050707	US 2004-822639	20040412
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

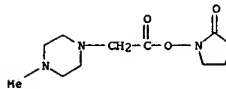
PRIORITY APPLN. INFO.:
 US 2004-751353 A2 20040105
 US 2004-822639 A2 20040412
 US 2004-751354 A 20040105
 US 2004-751387 A 20040105
 US 2004-751388 A 20040105
 US 2004-852730 A 20040524
 WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:112150
 IT 857027-09-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (isobarically labeled analytes and fragment ions derived therefrom)
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 CN 2-Pyrrolidinone, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

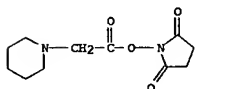
L7 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



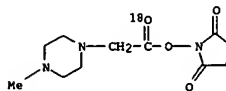
L7 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



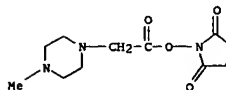
IT 741683-79-4P 856187-87-6P 856188-06-2P
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RN 856187-87-6 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)



RN 856188-06-2 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



ANSWER 6 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 08 Jul 2005
 AB This invention pertains to mixts. of isobarically labeled analytes and fragment ions thereof.
 ACCESSION NUMBER: 2005:588336 CAPLUS
 DOCUMENT NUMBER: 143:93635
 TITLE: Mixtures of isobarically labeled analytes and fragments ions derived therefrom
 INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.
 PATENT ASSIGNER(S): Applera Corporation, USA
 SOURCE: U.S. Pat. Appl. Publ., 29 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

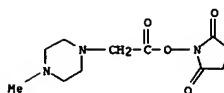
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US 2005147985	A1	20050707	US 2004-822639	20040412
US 2005148087	A1	20050707	US 2004-852730	20040524
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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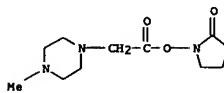
PRIORITY APPLN. INFO.:
 US 2004-751353 A2 20040105
 US 2004-751354 A 20040105
 US 2004-751387 A 20040105
 US 2004-751388 A 20040105
 US 2004-822639 A2 20040412
 US 2004-852730 A 20040524
 WO 2005-US223 W 20050105

IT 856188-06-2P 857027-09-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)
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 CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

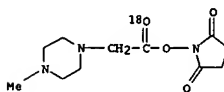
L7 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 857027-09-9 CAPLUS
 CN 2-Pyrrolidinone, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

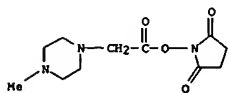


IT 856187-87-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)
 RN 856187-87-6 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl-18O]oxy]- (9CI) (CA INDEX NAME)



L7 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 16 May 2005
 AB Glycerophosphoethanolamine (GPEtn) and glycerophosphoserine (GPSe) lipids were reacted with a multiplexed set of differentially isotopically enriched N-methylpiperazine acetic acid N-hydroxysuccinimide ester reagents, which place isobaric mass labels at a primary amino group. The resulting derivitized aminophospholipids were isobaric and chromatog. indistinguishable but yielded pos. reporter ions (m/z 114 or 117) after collisional activation that could be used to identify and quantify individual members of the multiplex set. The chromatog. and mass spectrometric response of N-methylpiperazine amide-tagged aminophospholipids was probed using glycerophosphoethanolamine and glycerophosphoserine lipid stds. The [M+H]⁺ of each tagged aminophospholipid shifted 144 Da, and during collision-induced dissociation the major fragmentation ion was either m/z 114 or 117. This mode of detecting aminophospholipids was useful for an unbiased anal. of plasmalogen GPEtn lipids. Mol. species information on the esterified fatty acyl substituents was obtained by collisional activation of the [M+H]⁺ ions. The isotope-tagged reagents were used to assess changes in the distribution of GPEtn lipids after exposure of liposomes made from phospholipids extracted from RAW 264.7 cells to Cu2+/H2O2 to illustrate the ability of these reagents to aid in the mass spectrometric identification of aminophospholipid changes that occur during biol. stimuli.

ACCESSION NUMBER: 2005:412987 CAPLUS
 DOCUMENT NUMBER: 144:18604
 TITLE: Analysis of cell membrane aminophospholipids as isotope-tagged derivatives
 AUTHOR(S): Zemski Berry, Karin A.; Murphy, Robert C.
 CORPORATE SOURCE: Department of Pharmacology, University of Colorado Health Sciences Center, Aurora, CO, 80045, USA
 SOURCE: Journal of Lipid Research (2005), 46(5), 1038-1046
 CODEN: JLRPAA; ISSN: 0022-2275
 PUBLISHER: American Society for Biochemistry and Molecular Biology, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 856188-06-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and mass spectrometric anal. of cell membrane aminophospholipids as isotope-tagged derivs.)
 RN 856188-06-2 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 08 Oct 2004
 AB Provided is a method for characterizing a mol. by mass spectrometry, which mol. comprises one or more free amino groups, which method comprises: (a) reacting one or more free amino groups in the mol. with a mass tag reagent comprising a reactive functionality capable of reacting with an amino group, and a tertiary amino group linked to the reactive functionality; and (b) characterizing the mol. by mass spectrometry.

ACCESSION NUMBER: 2004:824132 CAPLUS
 DOCUMENT NUMBER: 141:310231
 TITLE: Mass labels
 INVENTOR(S): Hamon, Christian; Kuhn, Karsten; Thompson, Andrew; Reuschling, Dieter; Schaefer, Juergen
 PATENT ASSIGNER(S): Xzillion G.m.b.H. & Co. K.-G., Germany; Proteome Sciences PLC
 SOURCE: PCT Int. Appl., 63 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

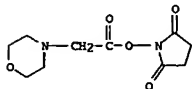
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004086050	A2	20041007	WO 2004-GB1167	20040318
WO 2004086050	A3	20041229		

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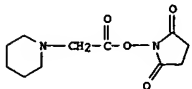
AU 2004223631 A1 20041007 AU 2004-223631 20040318
 CA 2520297 AA 20041007 CA 2004-2520297 20040318
 EP 1606623 A2 20051221 EP 2004-721565 20040318
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 WO 2005004684 A 20051012 NO 2005-4684 20051012
 NO 2005004684 A 20051012 GB 2003-6756 A 20030324
 PRIORITY APPLN. INFO.: WO 2004-GB1167 W 20040318

IT 741683-76-1P 741683-79-4P 768385-34-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (mass labels)
 RN 741683-76-1 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(4-morpholinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

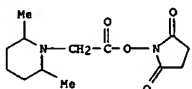
L7 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



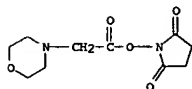
RN 741683-79-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



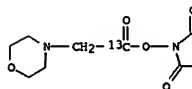
RN 768385-34-8 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(2,6-dimethyl-1-piperidinyl)acetyl]oxy]- (9CI)
(CA INDEX NAME)



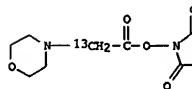
L7 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



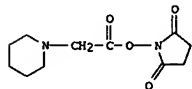
RN 741683-77-2 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 741683-78-3 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 741683-79-4 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 741683-80-7 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(1-piperazinylacetyl)oxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 20 Aug 2004

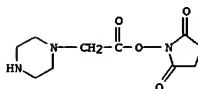
AB This invention pertains to methods, mixts., kits and/or compns. for the determination of analytes by mass anal. using unique labeling reagents or sets of unique labeling reagents. The labeling reagents can be isomeric or isobaric and can be used to produce mixts. suitable for multiplex anal. of the labeled analytes.

ACCESSION NUMBER: 2004:681717 CAPLUS
DOCUMENT NUMBER: 141:202794
TITLE: Methods, mixtures, kits and compositions pertaining to analyte determination
INVENTOR(S): Pappin, Darryl J. C.; Bartlett-Jones, Michael
PATENT ASSIGNEE(S): Applera Corporation, USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

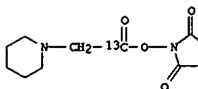
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004070352	A2	20040819	WO 2004-US2077	20040127
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AU 2004209401	A1	20040819	AU 2004-209401	20040127
CA 2488584	AA	20040819	CA 2004-2488584	20040127
US 2004219685	A1	20041104	US 2004-765264	20040127
US 2004220412	A1	20041104	US 2004-765267	20040127
US 2004219686	A1	20041104	US 2004-765458	20040127
EP 1588145	A2	20051026	EP 2004-705571	20040127
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US 2006105416	A1	20060518	US 2005-319685	20051228
PRIORITY APPLN. INFO.:				
			US 2003-443612P	P 20030130
			US 2004-765267	A1 20040127
			WO 2004-US2077	W 20040127

IT 741683-76-1P 741683-77-2P 741683-78-3P
741683-79-4P 741683-80-7P 741683-86-3P
741683-93-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(methods, mixts., kits and compns. pertaining to analyte determination)
RN 741683-76-1 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)

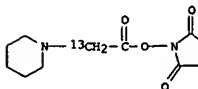
L7 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 741683-86-3 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 741683-93-2 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)

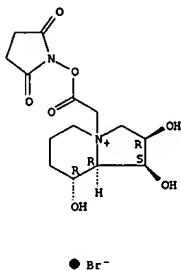


*L7 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 17 May 2004
 AB The process comprises N-alkylating swainsonine with bromoacetic acid N-succinimido ester in acetone under refluxing, coupling with bovine serum albumin in water at 0 °C, dialyzing, freeze drying, and emulsifying with Freund's adjuvant.

ACCESSION NUMBER: 2004:399339 CAPLUS
 DOCUMENT NUMBER: 141:254556
 TITLE: Grassland's locoweed toxin vaccine
 INVENTOR(S): Dong, Deven; Cao, Guangrong; Zhao, Baoyu; Ge, Pengbin
 PATENT ASSIGNEE(S): Danong Biotechnology Co., Ltd., Yangling, Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.
 CODEN: CXXKEY
 PATENT: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1395967	A	20030212	CN 2002-114592	20020524
PRIORITY APPL. INFO.:			CN 2002-114592	20020524
IT 754196-04-8P				
RI: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (vaccine for Grassland's locoweed toxin)				
RN 754196-04-8 CAPLUS				
CN Indolizinium, 4-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]octahydro-1,2,8-trihydroxy-, bromide, (1S,2R,8R,8aR)- (9CI) (CA INDEX NAME)				

Absolute stereochemistry.



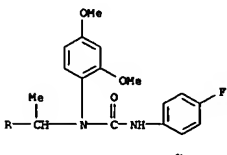
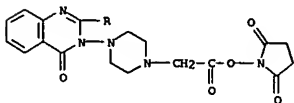
L7 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 US 2003220338 A1 20031127 US 2002-243074 20020912
 US 6596723 B1 20030722 US 2001-906864 20010716
 US 2003229097 A1 20031211 US 2002-334755 20021230
 US 6689782 B2 20040210
 WO 2004024140 A1 20040325 WO 2003-US5184 20030221

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

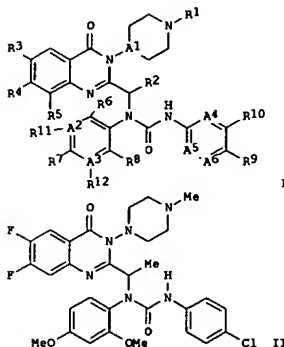
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AU 2003215343 A1 20040430 AU 2003-215343 20030221
 PRIORITY APPL. INFO.: US 2001-906864 A2 20010716
 US 2002-243074 A2 20020912
 US 2002-334755 A 20021230
 WO 2003-US5184 W 20030221

OTHER SOURCE(S): MARPAT 139:395945
 IT 626245-59-8P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of quinazolinylmethyl urea derivs. as fungal efflux pump inhibitors)
 RN 626245-59-8 CAPLUS
 CN Urea, N-(2,4-dimethoxyphenyl)-N-[1-[3-[4-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1-piperazinyl]-3,4-dihydro-4-oxo-2-quinazolinyl]ethyl]-N'-(4-fluorophenyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 28 Nov 2003
 GI

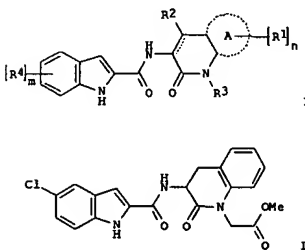


AB This invention relates to compds. of formula I [A1-A6 = C, N; R1 = H, alkyl, cycloalkyl, CH2-cycloalkyl, etc.; R2 = alkyl; R3-R12 = H, alkyl, CF3, alkoxy, halo, OH, CN, etc.] that are efflux pump inhibitors and therefore are useful as potentiators of anti-fungal agents for the treatment of infections caused by fungi that employ an efflux pump resistance mechanism. Thus, II was prepared and showed a reduced MIC value against Candida albicans in the presence of fluconazole.

ACCESSION NUMBER: 2003:390975 CAPLUS
 DOCUMENT NUMBER: 139:395945
 TITLE: Preparation of quinazolinylmethyl urea derivatives as fungal efflux pump inhibitors
 INVENTOR(S): Watkins, Will J.; Lemoine, Remy; Cho, Aesop; Palmae, Monica
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 109 pp., Cont.-in-part of U.S. Ser. No. 906,864.
 CODEN: USXXCO
 PATENT: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

L7 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 14 Sep 2003
 GI



AB The title compds. [I: A = phenylene or heteroarylene; m = 0-2; n = 0-2; R1 = halo, NO2, CN, OH, CO2H, etc.; R2 = H, OH, CO2H; R3 = H, OH, aryl, heterocyclyl, etc.; R4 = H, halo, NO2, CN, etc.] which possess glycogen phosphorylase inhibitory activity and accordingly have value in the treatment of disease states associated with increased glycogen phosphorylase activity such as diabetes type II, were prepared. Thus, amidation of 5-chloro-1H-indole-2-carboxylic acid with Me 2-(3-amino-2-oxo-3,4-dihydroquinolin-1-(2H)-yl)acetate (preparation given) in the presence of HOBT,

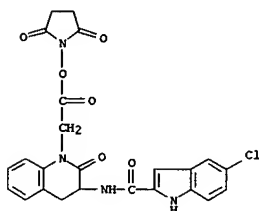
DCM and EDCI afforded 59I II. The compds. I showed IC50 values in the range 100µM to 1nM against hrl glycogen phosphorylase a. Pharmaceutical composition comprising the compound I was claimed.

ACCESSION NUMBER: 2003:719471 CAPLUS
 DOCUMENT NUMBER: 139:261174
 TITLE: Preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors
 INVENTOR(S): Birch, Alan Martin; Morley, Andrew David
 PATENT ASSIGNEE(S): Astrazeneca AB, Sued.; Astrazeneca UK Limited
 SOURCE: PCT Int. Appl., 86 pp.
 CODEN: PIXXD2
 PATENT: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

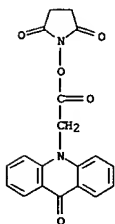
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2003074513	A2	20030912	WO 2003-GB893	20030304
WO 2003074513	A3	20031231		
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,				

L7 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
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 AU 2003216991 A1 20030916 AU 2003-216991 20030304
 EP 1485371 A2 20041215 EP 2003-712313 20030304
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 US 2005131016 A1 20050616 US 2003-506748 20030304
 JP 200525364 T2 20050825 JP 2003-572981 20030304
 PRIORITY APPLN. INFO.: GB 2002-5162 A 20020306
 WO 2003-GB893 W 20030304
 OTHER SOURCE(S): MARPAT 139:261174
 IT 599193-13-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of N-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)
 RN 599193-13-2 CAPLUS
 CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl- (9CI) (CA INDEX NAME)



L7 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 01 Dec 1999
 AB A simple and sensitive LC method that rapidly labels amino compds. including amino acids, using acridine-9-N-acetyl-N-hydroxysuccinimide (AAHS) which was synthesized by the reaction of acridine-9-N-acetic acid with benzenedisulfonyl-N-hydroxysuccinimide, was developed. A mixture of amines is treated with AAHS in the presence of triethylamine in non-aqueous acetonitrile or in 0.2 mol l-1 borate buffer at pH 8.0-9.0 in 40% volume/volume acetonitrile solution to give quant. yields of amides. The emission maximum for the derivatized amines is 435 nm (λ_{ex} = 404 nm). The labeled derivs. are very stable; no significant decomposition is observed after heating in 50% acetonitrile at 40° for 24 h. Studies on the derivatization conditions indicate that amines or amino acids react very rapidly with AAHS under the proposed conditions. The method, in conjunction with a multi-step gradient, offers baseline resolution of common amine or amino acid derivs. on a reversed-phase C18 column. This method is more convenient and more efficient than previous methods which require prior conversion of carboxylic acids to acyl chlorides, which are unstable to moisture. The LC separation of amine or amino acid derivs. has good reproducibility. The established method is also suitable for the determination of other amine compds. in various biol. fluids.
 ACCESSION NUMBER: 1999:759500 CAPLUS
 DOCUMENT NUMBER: 132:148595
 TITLE: Characterization and application of acridine-9-N-acetyl-N-hydroxysuccinimide as a pre-column derivatization agent for fluorimetric detection of amino acids in liquid chromatography
 AUTHOR(S): You, Jinmao; Lao, Wenjian; You, Jing; Wang, Guojun
 CORPORATE SOURCE: Lanzhou Inst. Chem. Phys., Chinese Academy of Sciences, Lanzhou, 730000, Peop. Rep. China
 SOURCE: Analyst (Cambridge, United Kingdom) (1999), 124(12), 1755-1760
 CODEN: ANALAO; ISSN: 0003-2654
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 150321-96-3P
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
 (characterization and application of acridine-9-N-acetyl-N-hydroxysuccinimide as a pre-column derivatization agent for fluorimetric detection of amino acids in liquid chromatog.)
 RN 150321-96-3 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[9-oxo-10(9H)-acridinyl]acetyl]oxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 26 Mar 1996
 AB The synthesis of 10,10'-substituted-9,9'-bisacridine mols. and their derivs. is disclosed. These mols. catalyze the production of light by chemiluminescence in the presence of a signal solution having at a pH from about 10.0 to about 14.0, at a concentration effective for producing a chemiluminescent signal, a chelating agent, a sulfonate, a reducing sugar, and oxidant or combination of oxidants, an alc. and aqueous sodium tetraborate. These 10,10'-substituted-9,9'-bisacridines are used alone or attached to haptens or macromols. and are utilized as labels in the preparation of chemiluminescent, homogeneous or heterogeneous assays. They are also used in conjunction with other chemiluminescent label mols. to produce multiple analyte chemiluminescent assays. An assay demonstrating the linearity of the signal with increasing dilns. of an anti-TSH-10,10'-para-toluo-9,9'-bisacridine conjugate is described.
 ACCESSION NUMBER: 1996:171871 CAPLUS
 DOCUMENT NUMBER: 124:225820
 TITLE: Preparation of derivatized 10,10'-substituted-9,9'-bisacridine luminescent molecules and signal solutions
 Katsilometes, George W.
 INVENTOR(S):
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 50 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9600392	A1	19960104	WO 1995-US7966	19950622
W: CN, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 766825	A1	19970409	EP 1995-924671	19950622
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1155931	A	19970730	CN 1995-194681	19950622
JP 10502346	T2	19980303	JP 1995-503340	19950622
US 5866335	A	19990202	US 1996-767288	19961216
HK 1001416	A1	20050826	HK 1998-100291	19980114
PRIORITY APPLN. INFO.:			US 1994-265481	A 19940624
			WO 1995-US7966	W 19950622

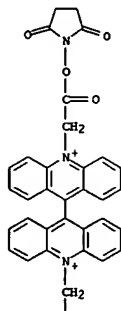
IT 174569-85-8
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (preparation of bisacridine luminescent derivs. and signal solns.)
 RN 174569-85-8 CAPLUS
 CN 9,9'-Biacridinium, 10,10-bis[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-, dinitrate (9CI) (CA INDEX NAME)

CH 1

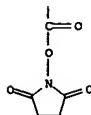
CRN 174569-84-7
 CMF C38 H28 N4 O8

* L7 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



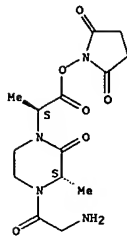
PAGE 2-A



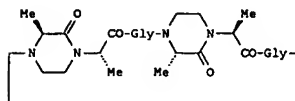
CM 2

CRN 14797-55-8
CMP N O3

L7 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

L7 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 21 Mar 1995
GI

I

AB The crystal structure of 18-membered cyclic pseudopeptide I, containing N,N'-ethylene-bridged-(S)-alanyl-(S)-alanine and glycine was determined by x-ray crystallog. Moreover, the structure of this pseudopeptide was examined by 1H NMR measurement in CD3CN, and by mol. mechanics calcs.

ACCESSION NUMBER: 1995:427460 CAPLUS
DOCUMENT NUMBER: 123:83982

TITLE: Structure of cyclic hexa-pseudopeptide constructed from N,N'-ethylene-bridged-(S)-alanyl-(S)-alanine and glycine

AUTHOR(S): Kojima, Yoshitane; Yamashita, Tetsushi; Miyake, Hiroyuki
CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan
SOURCE: Chemistry Letters (1995), (3), 201-2

CODEN: CMLTAG; ISSN: 0366-7022

PUBLISHER: Nippon Kagakai
DOCUMENT TYPE: Journal
LANGUAGE: English

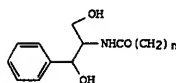
IT 164857-03-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(structure of cyclic hexapseudopeptide constructed from ethylene-bridged alanylalanine and glycine)

RN 164857-03-8 CAPLUS

CN Piperazinone, 4-(aminoacetyl)-1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-1-methyl-2-oxoethyl]-3-methyl-, monohydrochloride, [5-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 23 Jul 1994
GI

I

AB Fluorescent compds. useful in the determination of chloramphenicol acetyltransferase (CAT) enzyme activity are described. The compds. BASE-Ns-*X are fluorescent derivs. related in structure to chloramphenicol comprising a base (I), substituted at one to five aromatic ring positions by substituents, which may be the same or different, that are alkyl, hydroxy, alkoxy, aryl, halo, nitro, amino, alkylamido, or arylamido, and 0 < n < 6; and a fluorescent moiety *X (nonreduced tricyclic difluoroboradiazaindacene fluorophore) linked to the terminal CH2 of BASE through a linker Ns (e.g., NH*X, NHOCH2*X). The substrate compds. are acylated in the presence of CAT to produce fluorescent mono- and diacylated products, which are then phys. separated from the reaction mixture

and quantitated by means of their fluorescence and/or absorbance. Fluorescent mols. conjugated to chloramphenicol include derivs. of fluorescein, rhodamine, coumarin, dimethylaminonaphthalenesulfonic acid (dansyl), pyrene, anthracene, nitrobenzoxadiazole (NBD), acridine and dipyrromethaneboron difluoride.

ACCESSION NUMBER: 1994:435864 CAPLUS
DOCUMENT NUMBER: 121:35864

TITLE: Fluorescent chloramphenicol derivatives for determination of chloramphenicol acetyltransferase activity

INVENTOR(S): Haughland, Richard P.; Kang, Hee C.; Young, Steven L.; Melner, Michael H.

PATENT ASSIGNEE(S): Molecular Probes, Inc., USA
SOURCE: U.S., 13 pp. Cont. of U.S. Ser. No. 321,494, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5262545	A	19931116	US 1991-722352	19910618
US 5364764	A	19941115	US 1992-994992	19921221
PRIORITY APPLN. INFO.:			US 1989-321494	B1 19890309
			US 1991-722352	A3 19910618

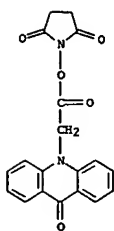
OTHER SOURCE(S): MARPAT 121:35864

IT 150321-96-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(fluorescent chloramphenicol derivs. for determination of chloramphenicol acetyltransferase activity)

RN 150321-96-3 CAPLUS

CN 2,5-Pyrrolidinedione, 1-[[[9-oxo-10(9H)-acridinyl]acetyl]oxy]- (9CI) (CA

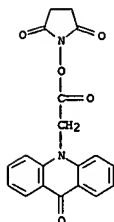
*L7 ANSWER 16 OF 21 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)
INDEX NAME)



L7 ANSWER 17 OF 21 CAPIUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 05 Mar 1994
AB A photoluminometric immunoassay comprises reacting 2 immunoreactants, 1 labeled with a photoluminescent energy transfer donor capable of photoluminescence and the other labeled with a photoluminescent energy transfer acceptor complementary to the donor; exciting the sample with radiation; and calculating the apparent luminescence lifetime to determine the presence of a reaction product. Studies were done using goat anti-mouse IgG labeled with the donor dichlorotriazinylaminofluorescein and mouse IgG labeled with the acceptor tetramethylrhodamine isothiocyanate.
ACCESSION NUMBER: 1994:101282 CAPIUS
DOCUMENT NUMBER: 120:101282
TITLE: Fluorescent energy transfer immunoassay
INVENTOR(S): Lakowicz, Joseph; Maliwal, Badri; Thompson, Richard; Ozinskas, Alvydas
PATENT ASSIGNEE(S): University of Maryland, USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 552108	A2	19930721	EP 1993-400091	19930115
EP 552108	A3	19930922		
R: DE, FR, GB, IT				
CA 2087413	AA	19930718	CA 1993-2087413	19930115
JP 06066802	A2	19940311	JP 1993-6057	19930118
JP 3325939	B2	20020917		
US 5631169	A	19970520	US 1994-183238	19940119
PRIORITY APPLN. INFO.:				
IT 150321-96-3D, conjugates with immunoreactant			US 1992-822233	A 19920117
RL: ANST (Analytical study)				
(in photoluminometric immunoassay)				
RN 150321-96-3 CAPIUS				
CN 2,5-Pyrrolidinedione, 1-[[[9-oxo-10(9H)-acridinyl]acetyl]oxy]- (9CI) (CA INDEX NAME)				

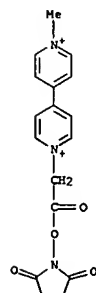
L7 ANSWER 17 OF 21 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)



L7 ANSWER 18 OF 21 CAPIUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 01 Nov 1992
AB Metmyoglobin covalently linked with viologen was prepared and reduced by dithionite ions faster than the native metmyoglobin, suggesting that the reduction by dithionite of the attached viologen was followed by a rapid intramol. electron transfer from the viologen radical cation to the heme iron center.
ACCESSION NUMBER: 1992:566123 CAPIUS
DOCUMENT NUMBER: 117:166123
TITLE: Effect of the chemical modification by viologen on the reduction of metmyoglobin
AUTHOR(S): Tsukahara, Keiichi; Todorobaru, Hiromi
CORPORATE SOURCE: Fac. Sci., Nara Women's Univ., Nara, 630, Japan
SOURCE: Chemistry Letters (1992), (7), 1181-4
CODEN: CHLTAG; ISSN: 0366-7022
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 143674-76-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and coupling of, with metmyoglobin)
RN 143674-76-4 CAPIUS
CN 4,4'-Bipyridinium, 1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1'-methyl-, diperchlorate (9CI) (CA INDEX NAME)

CH 1

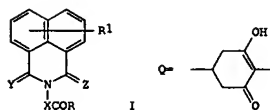
CRN 143674-75-3
CHF C17 H17 N3 O4



CH 2

CRN 14797-73-0
CHF C1 O4

L7 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L7 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 05 Oct 1991
GI

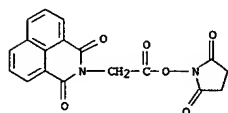
AB The title compds. [I; R = ON:CR5R6; R1 = 1-4 substituents which may be the same or different selected from H, halo, cyano, (halo)alkyl, etc.; R5 = H, cyano, alkyl, alkenyl, etc.; R6 = H, cyano, (halo)alkyl, alkoxy, etc.; X = (un)substituted alkylene; Y, Z = O, S] were prepared as safeners for 2-[(hetero)aryloxyphenoxyl]acetate and -propionate or alkoximinomethylenecyclohexenone herbicides. Thus, I (R1 = H, X = CH2, Y = Z = O) (II; R = Cl) (preparation given) was condensed with Me2C:NOH to give

II (R = ON:CH2). II [R = ON:CR5R6; R5R6 = (CH2)3CH:C(OEt)] reduced damage to wheat of 0.03 kg/ha of the herbicide EtSCHMEH221C(:NOR)Pr (Z1 = hydroxycyclohexenonylene group Q) from 70 to 10% (with 95% control of annual ryegrass) at 0.125 kg/ha.

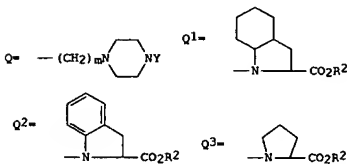
ACCESSION NUMBER: 1991:535937 CAPLUS
DOCUMENT NUMBER: 115:135937
TITLE: Preparation of N-[(alkylideneimino)oxycarbonyl]alkyl]-1,8-naphthalenedicarboximides and analogs as herbicide safeners
INVENTOR(S): Saupe, Thomas; Meyer, Norbert; Plath, Peter; Schirmer, Ulrich; Wuerzer, Bruno; Westphalen, Karl Otto; Patsch, Manfred; Pfister, Juergen
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Eur. Pat. Appl., 45 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 430004	A2	19910605	EP 1990-122030	19901117
EP 430004	A3	19911218		
R: AT, CH, DE, ES, FR, GB, IT, LI, NL, SE				
DE 3939379	A1	19910606	DE 1989-3939379	19891129
DE 4021654	A1	19920109	DE 1990-4021654	19900707
CA 2030129	AA	19910530	CA 1990-2030129	19901116
US 5076831	A	19911231	US 1990-615865	19901120
JP 03190861	A2	19910820	JP 1990-323392	19901128
PRIORITY APPLN. INFO.:			DE 1989-3939379	A 19891129
			DE 1990-4021654	A 19900707

L7 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
OTHER SOURCE(S): MARPAT 115:135937
IT 135980-49-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as herbicide safener)
RN 135980-49-3 CAPLUS
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)



L7 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 06 Jan 1990
GI



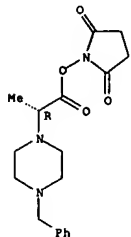
AB RR1CHCONHCH(CO2R2)(CH2)2COOR3 [I; R = H, lower alkyl, PhCH2; R1 = (NH)m(CH2)nW, Q; R2 = H, lower alkyl; R3 = Q1, Q2, Q3, NR4CHR2CO2R2; W = H, CO2H, NH2, OH; Y = H, lower alkyl, Ph, PhCH2; R4 = C4-8 cycloalkyl, halo, alkoxy, (OR-substituted) Ph; m = 0, 1; n = 0-4] and their salts are prepared. Refluxing 28 g 2-(5)-bromopropionic acid with 42 g PhCH2OH in PhMe gave 17.0 g benzyl 2-(5)-bromopropionate, 2.2 g of which was stirred with 1.6 g 1-benzylpiperazine in MeCN, then hydrolyzed with aqueous NaOH to give 1.0 g 2-(R)-(4-benzylpiperazinyl)propionic acid (II). Then, 24.5 g N-benzylloxycarbonyl-O1-ethyl-D-glutamic acid was stirred with 17.5 g Et (2S, 3aS, 7aS)-octahydro-1H-indole-2-carboxylate-HCl in CH2Cl2, then reduced, and then hydrolyzed with aqueous NaOH to give 13.01 g (2S, 3aS, 7aS)-1-(γ-D-glutamyl)octahydro-1H-indole-2-carboxylic acid (III). Then, 0.8 g II was treated with 0.4 g N-hydroxysuccinimide in CHCl3 to give 2-(R)-(4-benzylpiperazinyl)propionic acid N-hydroxysuccinimide ester, which was treated with 1.0 g III in THF to give 0.8 g (2S, 3aS, 7aS)-1-[N-2(R)-(4-benzylpiperazinyl)propionyl]-γ-D-glutamyl]octahydro-1H-indole-2-carboxylic acid, 0.4 g of which was refluxed with HCO2H in MeOH in the presence of Pd black for 4 h to give 0.2 g (2S, 3aS, 7aS)-1-[N-(2R)-piperazinylpropionyl]-γ-D-glutamyl]octahydro-1H-indole-2-carboxylic acid, which showed an IC50 of 2.1 × 10⁻⁷ M against angiotensin converting enzyme.

ACCESSION NUMBER: 1990:7937 CAPLUS
DOCUMENT NUMBER: 112:7937
TITLE: Preparation and testing of tripeptide derivatives as cardiovascular agents
INVENTOR(S): Sawayama, Tadashi; Nishimura, Kazuya; Deguchi, Takashi
PATENT ASSIGNEE(S): Dai Nippon Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JDOXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

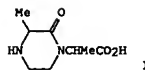
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01125357	A2	19890517	JP 1987-281873	19871106

L7 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 PRIORITY APPLN. INFO.: JP 1987-281873 19871106
 OTHER SOURCE(S): MARPAT 112:7937
 IT 124078-64-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and condensation of, with (glutamyl)indolecarboxylic acid)
 RN 124078-64-4 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[1-oxo-2-[4-(phenylmethyl)-1-piperazinyl]propoxy]-
 , (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



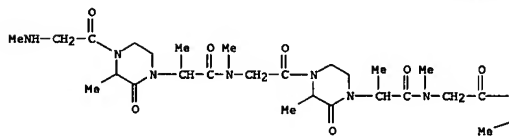
L7 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 22 Jul 1988
 GI



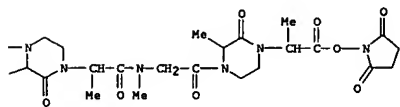
AB Synthetic routes to cyclic peptides cyclo(Sar-EAA)4 (EAA = residue of
 title acid 1) and cyclo(Sar-Sar-Sar-EAA)2 are described. Interaction of
 these cyclic peptides with p-toluenesulfonic acid salt of sodium,
 benzylamine, and 4-phenylbutylamine were studied by 1H NMR.
 ACCESSION NUMBER: 1988:423356 CAPLUS
 DOCUMENT NUMBER: 109:23356
 TITLE: Interactions of organic substrates with 30- and
 36-membered ring peptides containing
 (2S,3'S)-2-(2'-oxo-3'-methylpiperazin-1'-yl)propanoic
 acid and sarcosine
 AUTHOR(S): Kojima, Yoshitane; Yamashita, Tetsushi; Shibata, Kozo;
 Ohnaka, Akio
 CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan
 SOURCE: Polymer Journal (Tokyo, Japan) (1987), 19(10), 1221-3
 CODEN: POLJTB; ISSN: 0032-3896
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 114967-10-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and cyclization of)
 RN 114967-10-1 CAPLUS
 CN 1-Piperazineacetamide, N-[2-[4-[2-[[2-[2-[(2,5-dioxo-1-
 pyrrolidinyl)oxy]-1-methyl-2-oxoethyl]-2-methyl-3-oxo-1-piperazinyl]-2-
 oxoethyl]methylamino]-1-methyl-2-oxoethyl]-2-methyl-3-oxo-1-piperazinyl]-2-
 oxoethyl]-N,α,3-trimethyl-4-[[methyl[2-[3-methyl-4-
 [(methylamino)acetyl]-2-oxo-1-piperazinyl]-1-oxopropyl]amino]acetyl]-2-oxo-
 , [35-[1[R*[R*[R*[R*(R*)]]]],3R*,4[R*(R*)]]]-, mono(trifluoroacetate)
 (9CI) (CA INDEX NAME)
 CM 1
 CRN 114967-09-8
 CMF C48 H73 N13 O15

L7 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



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FILE 'REGISTRY' ENTERED AT 15:30:37 ON 06 SEP 2006

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 2 S L1

L4 33 S L1 FULL

L5 1 S L2

L6 152 S L2 FULL

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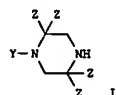
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L8 52 S L6

L9 15 S L4 NOT L6

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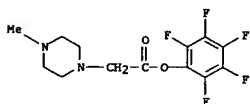
L8 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
GI



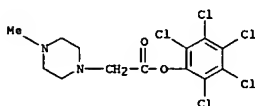
AB Isotopically enriched N-substituted piperazines (I) or salts thereof, comprising one or more heavy atom isotopes (Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or fluorine atoms; Z = independently H, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H or F atoms, a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms), or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms; wherein the N-methylpiperazine is isotopically enriched with either of 13C and/or 15N) are prepared. N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like (no data). Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

ACCESSION NUMBER: 2005:592130 CAPLUS
DOCUMENT NUMBER: 143:115574
TITLE: Preparation of isotopically enriched N-substituted piperazines
INVENTOR(S): Pappin, Darryl J. C.; Pillai, Sasi; Coull, James M.
PATENT ASSIGNEE(S): Applera Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 29 pp.
CODEN: USXXCO

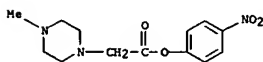
L8 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
ED INDEX NAME)



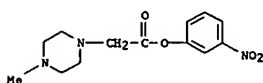
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CN 1-Piperazineacetic acid, 4-methyl-, pentachlorophenyl ester (9CI) (CA INDEX NAME)



RN 857503-01-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)



RN 857503-03-8 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, 3-nitrophenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

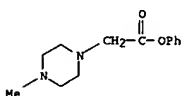
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AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

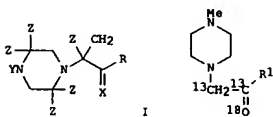
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US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:115574
IT 856187-95-6, 4-Methylpiperazine-1-acetic acid phenyl ester
RI: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)
RN 856187-95-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



IT 857027-10-2P 857503-00-5P 857503-01-6P
857503-03-8P
RI: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)
RN 857027-10-2 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 08 Jul 2005
GI



AB In some embodiments, this invention pertains to active esters of N-substituted piperazine acetic acid (R = leaving group; X = O, S; Y = C1-C6 alkyl, C1-C6 alkyl ether; Z = H, 2H, F, Cl, Br, iodide, amino acid side chain, C1-C6 alkyl, C1-C6 alkyl ether), including isotopically enriched versions thereof. In some embodiments, this invention pertains to methods for the preparation of active esters of N-substituted piperazine acetic acid, including isotopically enriched versions thereof. For example, the isotopically labeled N-methylpiperazine II (R1 = 18OH) reacted with the trifluoroacetic acid ester of N-hydroxysuccinimide to give the succinate II (R1 = OR2, R2 = succinimido).

ACCESSION NUMBER: 2005:592129 CAPLUS
DOCUMENT NUMBER: 143:97398
TITLE: Preparation of active esters of N-substituted piperazine acetic acids, including isotopically enriched versions
INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.
PATENT ASSIGNEE(S): Applera Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 33 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148771	A1	20050707	US 2004-751354	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

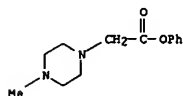
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105

L8 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ED Entered STN: 08 Jul 2005
 AB This invention pertains to mixts. of isobarically labeled analytes and fragment ions thereof.
 ACCESSION NUMBER: 2005:592027 CAPLUS
 DOCUMENT NUMBER: 143:93642
 TITLE: Mixtures of isobarically labeled analytes and fragments ions derived therefrom
 INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.
 PATENT ASSIGNEE(S): Applera Corp., USA
 SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 751,353.
 CODEN: USXXCO
 Patent
 DOCUMENT TYPE: English
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

OTHER SOURCE(S): MARPAT 143:97398
 IT 856187-95-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of active esters of N-substituted piperazine acetic acids and their labeled deriva.)
 RN 856187-95-6 CAPLUS
 CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



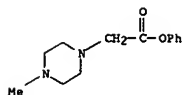
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 US 2005147985 A1 20050707 US 2004-822639 20040412
 US 2005147982 A1 20050707 US 2004-751353 20040105
 US 2005148087 A1 20050707 US 2004-852730 20040524
 AU 2005205522 A1 20050728 AU 2005-205522 20050105
 WO 2005068446 A1 20050728 WO 2005-US223 20050105

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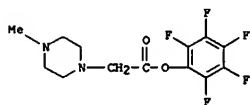
PRIORITY APPLN. INFO.:
 US 2004-751353 A2 20040105
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 US 2004-751387 A 20040105
 US 2004-751388 A 20040105
 US 2004-822639 A2 20040412
 US 2004-852730 A 20040524
 WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:93642
 IT 856187-95-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)
 RN 856187-95-6 CAPLUS
 CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)

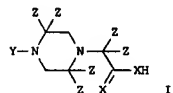
L8 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 857027-10-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)
 RN 857027-10-2 CAPLUS
 CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 08 Jul 2005
 GI



AB Isotopically enriched N-substituted piperazine-1-acetic acids (I) or salts thereof, comprising one or more heavy atom isotopes [X = O, S; Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or F atoms; Z = independently H, deuterium, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms, or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms)] are prepared N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like. Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

ACCESSION NUMBER: 2005:588426 CAPLUS
 DOCUMENT NUMBER: 143:115568
 TITLE: Preparation of isotopically enriched N-substituted piperazine-1-acetic acids
 INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.
 PATENT ASSIGNEE(S): Applera Corp., USA
 SOURCE: U.S. Pat. Appl. Publ., 29 pp.
 CODEN: USXXCO
 Patent
 DOCUMENT TYPE: English
 LANGUAGE: English

L8 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

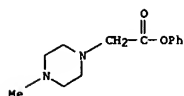
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US 2005148774	A1	20050707	US 2004-751387	20040105
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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PRIORITY APPLN. INFO.:
US 2004-751353 A 20040105
US 2004-751354 A 20040105
US 2004-751387 A 20040105
US 2004-751388 A 20040105
US 2004-822639 A 20040412
US 2004-852730 A 20040524
WO 2005-US223 W 20050105

OTHER SOURCE(S): MARPAT 143:115568
IT 856187-95-6, 4-Methylpiperazine-1-acetic acid phenyl ester
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 856187-95-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



IT 857027-10-2P 857503-00-5P 857503-01-6P
857503-03-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)
RN 857027-10-2 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STM: 08 Jul 2005
AB This invention pertains to isobarically labeled analytes and fragment ions thereof.
ACCESSION NUMBER: 2005:588349 CAPLUS
DOCUMENT NUMBER: 143:112150
TITLE: Isobarically labeled analytes and fragment ions derived therefrom
INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.
PATENT ASSIGNEE(S): Applera Corporation, USA
SOURCE: U.S. Pat. Appl. Publ., 88 pp., Cont.-in-part of U.S. Ser. No. 822,639.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
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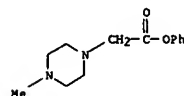
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US 2005147982	A1	20050707	US 2004-751353	20040105
US 2005147985	A1	20050707	US 2004-822639	20040412
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

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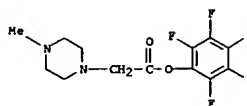
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PRIORITY APPLN. INFO.:
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US 2004-852730 A 20040524
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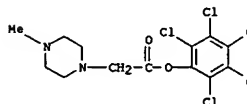
OTHER SOURCE(S): MARPAT 143:112150
IT 856187-95-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(isobarically labeled analytes and fragment ions derived therefrom)
RN 856187-95-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



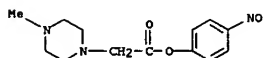
L8 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



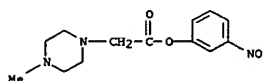
RN 857503-00-5 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, pentachlorophenyl ester (9CI) (CA INDEX NAME)



RN 857503-01-6 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

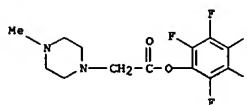


RN 857503-03-8 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, 3-nitrophenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

IT 857027-10-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(isobarically labeled analytes and fragment ions derived therefrom)
RN 857027-10-2 CAPLUS
CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 08 Jul 2005
 AB This invention pertains to mixts. of isobarically labeled analytes and fragment ions thereof.
 ACCESSION NUMBER: 2005:588336 CAPLUS
 DOCUMENT NUMBER: 143:93635
 TITLE: Mixtures of isobarically labeled analytes and fragments ions derived therefrom
 INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.
 PATENT ASSIGNEE(S): Applera Corporation, USA
 SOURCE: U.S. Pat. Appl. Publ., 29 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

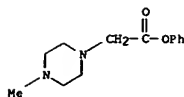
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US 2005147985	A1	20050707	US 2004-822639	20040412
US 2005148087	A1	20050707	US 2004-852710	20040524
AU 2005205522	A1	20050728	AU 2005-205522	20050105
WO 2005068446	A1	20050728	WO 2005-US223	20050105

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, T, TH, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LJ, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

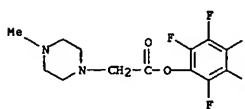
PRIORITY APPLN. INFO.:
 US 2004-751353 A2 20040105
 US 2004-751354 A 20040105
 US 2004-751387 A 20040105
 US 2004-751388 A 20040105
 US 2004-822639 A2 20040412
 US 2004-852730 A 20040524
 WO 2005-US223 W 20050105

IT 856187-95-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)
 RN 856187-95-6 CAPLUS
 CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)

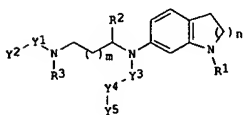
L8 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 857027-10-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)
 RN 857027-10-2 CAPLUS
 CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 01 Apr 2005
 GI



AB The title compds. (I) [wherein the fused pyrrolidine ring optionally contains a single carbon-carbon double bond or a single carbon ring member adjacent to the nitrogen is optionally 10 substituted; n = 1, 2; m = 0, 1, 2; Y1 = each C0-5 alkylene, alkenylene, alkynylene, or acylene -CH(CONRfRg)-, -CH(CO2C1-4 alkyl)- (where Rf, Rg = H or C1-4 alkyl); Y2 = H, Ph, C4-8 cycloalkyl, or C4-8 cycloalkenyl, wherein each ring optionally substituted; Y3 = -CH2-, carbonyl or sulfone; Y4 = (un)substituted C2-7 alkyl, C2-7 alkenyl, C2-7 alkynyl or C3-7 cycloalkyl; Y5 = each (un)substituted Ph, furanyl, thiophenyl, pyrrolyl, pyrrolinyl, pyrrolidinyl, dioxolanyl, oxazolyl, thiazolyl, imidazolyl, imidazolidinyl, pyrazolyl, pyrazolinyl, pyrazolidinyl, oxadiazolyl, triazolyl, thiadiazolyl, pyranal, pyridyl, piperidinyl, dioxanyl, morpholinyl, dithianyl, thiomorpholinyl, pyridazinyl, pyrimidinyl, pyrazinyl, piperazinyl, naphthalenyl, quinolinyl, purinyl, indolyl, benzofuranal; R1 = H ORa, SO2Ra (where Ra = H, each (un)substituted C1-5 alkyl, C1-5 alkenyl, C1-5 alkynyl, or C1-5 acyl); R2, R3 = H, each (un)substituted C1-5 alkyl, C1-5 alkenyl, or C1-5 alkynyl, or R2 and R3 may be taken together with the nitrogen of R3 attachment to form piperidine or pyrrolidine or azepine] and enantiomers, diastereomers, hydrates, solvates and pharmaceutically acceptable salts, esters and amides thereof are prepared. These compds. are novel non-peptidic NPY Y2 receptor inhibitors and useful in treating or preventing anxiolytic disorders or depression, injured mammalian nerve tissue, conditions responsive to treatment through administration of a neurotrophic factor, neurol. disorders, bone loss, substance related disorders, obesity, or an obesity-related disorder. They are also useful in modulating endocrine functions, particularly endocrine functions controlled by the pituitary and hypothalamic glands, and are therefore useful in the treatment or prevention of in ovulation and infertility. Thus, to a solution of 1-[6-(1-benzylpiperidin-4-ylamino)-2,3-dihydroindol-1-yl]ethanone > (250 mg, 0.72 mmol) in CH2Cl2 (10 mL) was added cinnamoyl chloride (160 mg, 0.93 mmol) and triethylamine (TEA, 0.30 mL, 2.2 mmol). The mixture was stirred at 25° for 16 h to give, after purification by preparative TLC (PLC, 20% EtOAc/CH2Cl2) to give 290 mg

(85i) trans-N-(1-acetyl-2,3-dihydro-1H-indol-6-yl)-N-(1-benzylpiperidin-4-yl)-3-phenylacrylamide (II). II and trans-N-(1-acetyl-2,3-dihydro-1H-indol-6-yl)-3-(3-cyanophenyl)-N-[(1-(2-cyclopentylethyl)piperidin-4-yl)acrylamide in vitro inhibited the binding of [125I]PYY to KAN-TS endogenously expressing Y2 receptor with IC50 4.0 and 0.1 μM, resp.
 ACCESSION NUMBER: 2005:283204 CAPLUS
 DOCUMENT NUMBER: 142:355173
 TITLE: Preparation of 6-aminoindole and 7-amino-1,2,3,4-tetrahydroquinoline derivatives as non-peptidic neuropeptide Y (NPY) Y2 receptor inhibitors

L8 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 INVENTOR(S): Carruthers, Nicholas I.; Chai, Wenyang; Dax, Scott L.; Jablonowski, Jill A.; Li, Xiaobing; Lovenberg, Timothy W.; Murray, William V.; Rudolph, Dale A.; Seierstad, Mark; Youngman, Mark A.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 34 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

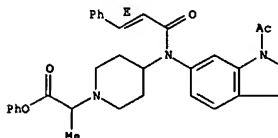
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005070534	A1	20050331	US 2004-949055	20040924
WO 2005030754	A1	20050407	WO 2004-US31378	20040924

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LJ, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

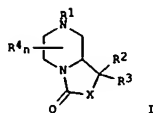
PRIORITY APPLN. INFO.: US 2003-505462P P 20030924
 OTHER SOURCE(S): MARPAT 142:355173

IT 848951-91-7P, trans-[4-[(1-Acetyl-2,3-dihydro-1H-indol-6-yl) (3-phenylacryloyl)amino]piperidin-1-yl]phenylacetic acid methyl ester
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Preparation of 6-aminoindole and 7-amino-1,2,3,4-tetrahydroquinoline derivs. as non-peptidic neuropeptide Y (NPY) Y2 receptor inhibitors)
 RN 848951-91-7 CAPLUS
 CN 1-Piperidineacetic acid, 4-[(1-acetyl-2,3-dihydro-1H-indol-6-yl) (2E)-1-oxo-3-phenyl-2-propenyl]amino]-α-methyl-, phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



* L8 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 11 Mar 2005
GI

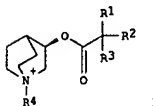


AB Title compds. represented by the formula I [wherein R1 = acyl; R2 = H, (un)substituted alkyl, heterocyclic ring; R3, R4 = independently (un)substituted alkyl, heterocyclic ring; n = 0-4; X = O, S, or (un)substituted N; and pharmaceutically acceptable salts thereof] were prepared as G protein-coupled receptors TGR23 ligand antagonists. For example, II, I (R1 = Boc, R2 = R3 = Ph, R4 = H, X = O), was given in a multi-step synthesis starting from Me 2-piperazinecarboxylate dihydrochloride. Selected I showed inhibition of human TGR23-2 ligand with IC50 values of less than 100 nM, and inhibition of human rectal cancer cell LS 174T. Thus, I and their pharmaceutical compns. are useful as TGR23 antagonists for the prevention and treatment of cancers, Alzheimer's disease, dementia, and etc..

ACCESSION NUMBER: 2005:219798 CAPLUS
DOCUMENT NUMBER: 142:298136
TITLE: Preparation of oxazolo[3,4-a]pyrazine derivatives as TGR23 ligand antagonists
INVENTOR(S): Fukatsu, Kohji; Nakayama, Yutaka; Tarui, Naoki; Mori, Masaaki; Matsumoto, Hirokazu; Kurasawa, Osamu; Banno, Hiroshi
PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan
SOURCE: PCT Int. Appl., 281 pp.
CODEN: PIXX02
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005021555	A1	20050310	WO 2004-JP12683	20040826
V:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BV, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TQ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,			

L8 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 12 Nov 2004
GI



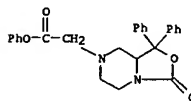
AB Compds.. I (R1, R3 = C3-C15 carbocyclic, or heterocycle; R2 = H, halogen, OH, C1-8 alkoxy, or C1-8 alkyl; R4 = C1-8 alkyl, amine, amide, ester, ether, etc.), in salt or zwitterionic form, are prepared for the treatment of conditions that are mediated by the muscarinic M3 receptor. Thus, to a solution of hydroxydiphenylacetic acid (R)-(1-azabicyclo[2.2.2]oct-3-yl) ester in DMF is added 3-aminopropyl bromide to give I (R1, R3 = Ph, R2 = OH, R4 = CH2CH2CH2NH2).

ACCESSION NUMBER: 2004:965247 CAPLUS
DOCUMENT NUMBER: 141:395704
TITLE: Preparation of quinuclidine salts for the treatment of diseases mediated by the muscarinic M3 receptor
INVENTOR(S): Collingwood, Stephen Paul; Cox, Brian; Baettig, Urs; Bhalay, Gurdip; Devereux, Nicholas James
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXX02
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096800	A2	20041111	WO 2004-EP4605	20040430
WO 2004096800	A3	20050106		
V:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BV, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TQ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LJ, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, HL, HR, NE, SN, TD, TG			
AU 2004234069	A1	20041111	AU 2004-234069	20040430
CA 2523436	AA	20041111	CA 2004-2523436	20040430
EP 1631569	A2	20060308	EP 2004-730519	20040430
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
BR 2004010238	A	20060516	BR 2004-10238	20040430
CN 1784400	A	20060607	CN 2004-80011886	20040430
NO 2005005688	A	20060109	NO 2005-5688	20051201

L8 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
EE, ES, FI, FR, GB, GR, HU, IE, IT, LJ, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, HL, MR, NE, SN, TD, TG
JP 2005306839 A2 20051104 JP 2004-247166 20040826
EP 1661898 A1 20060531 EP 2004-772639 20040826
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
PRIORITY APPLN. INFO.: JP 2003-306054 A 20030829
JP 2004-93606 A 20040326
WO 2004-JP12683 W 20040826

OTHER SOURCE(S): MARPAT 142:298136
IT 847556-46-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of oxazolo[3,4-a]pyrazine derivs. as TGR23 ligand antagonists)
RN 847556-46-1 CAPLUS
CN 3H-Oxazolo[3,4-a]pyrazine-7(1H)-acetic acid, tetrahydro-3-oxo-1,1-diphenyl-, phenyl ester (9CI) (CA INDEX NAME)

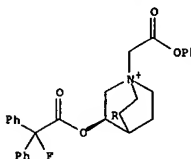


REFERENCE COUNT: 98 THERE ARE 98 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
PRIORITY APPLN. INFO.: GB 2003-10232 A 20030502
GB 2003-24887 A 20031024
WO 2004-EP4605 W 20040430

OTHER SOURCE(S): MARPAT 141:395704
IT 787626-47-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-aza-bicyclo[2.2.2]oct-3-yl esters for the treatment of conditions mediated by the muscarinic M3 receptor)
RN 787626-47-5 CAPLUS
CN 1-Azonabicyclo[2.2.2]octane, 3-[(fluorodiphenylacetyl)oxy]-1-(2-oxo-2-phenoxethyl)-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



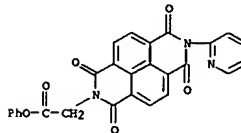
● Br⁻

ACCESSION NUMBER: 2003:913165 CAPLUS
DOCUMENT NUMBER: 139:381472
TITLE: Preparation of naphthaldiimide derivatives as
anti-Helicobacter agents
INVENTOR(S): Sugimori, Glichi Masui, Moriyasu, Nishida, Kuniyoshi
Hasegawa, Yasushi Kobayashi, Naotake
PATENT ASSIGNEE(S): Shionogi & Co., Ltd., Japan
SOURCE: PCT Int. Appl., 157 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003/095453	A1	2003.11.20	WO 2003/357595	2003.05.08
W:	AE, AG, AL, AM, AU, AZ, BA, BB, BG, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RU, SC, SD, SE, SG, SK, SL, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, KE, LG, MG, MU, MW, MY, NZ, SA, SZ, TG, UG, ZW, AM, AZ, BY, BG, BR, CA, CH, CL, CO, CR, CU, CY, CZ, DE, DK, EE, ES, FI, GB, GM, GR, GU, HK, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RU, SC, SD, SE, SG, SK, SL, TM, TN, TR, TT			

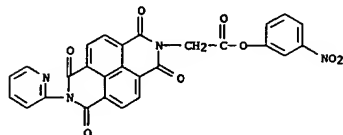
O=C1C(=O)N2C(=O)N(c3ccccc3)C(=O)c4ccc5c2c(=O)n(Cc6ccc(cc6)C(=O)Oc7ccc(cc7)[N+](=O)[O-])c8ccccc58)c14O=C1C(=O)N2C(=O)c3ccccc3N2C(=O)c4ccccc41COC(=O)c5ccc(F)cc5O=C1C(=O)N2C(=O)c3ccccc3N2C(=O)c4ccccc41COC(=O)c5ccccc5F

OTHER SOURCE(S): MARPAT 139:381472
 IT 625085-54-3P 625085-80-5P
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOI (Biological study); PREP (Preparation); USES (Uses)
 (preparation of naphthalimide derivs. as anti-Helicobacter agents)
 625085-54-3P US
 CN Benzo[lan]1[3,8]phenanthroline-2(1H)-acetic acid, 3,6,7,8-tetrahydro-1,3,6,8-tetrahydro-7-(2-(pyridin-2-yl)-ethyl)-, phenyl ester. (SCI). (CA INDEX NAME)

O=C1C(=O)N(C(=O)OCC(=O)c2ccccc2)C(=O)c3ccc4c5c6ccccc6c7c8c9ccccc9c8c7c5c4c31CN1C(=O)c2ccc3c4c1C(=O)N(COP(=O)([O-])[O-])C(=O)c4ccc3c2Cc1ccc(OC(=O)CN2C(=O)c3ccc4c5c2c(=O)n6ccccc6n5c(=O)c34)cc1O=C1C(=O)N(Cc2ccccc2C(=O)Oc3ccccc3[N+](=O)[O-])C(=O)c2cc3c(c1)c(c2)c(c4c3c5c6c7c8c9c5c6c7c8c9n1)cccc4

Page 3506/09/2006

L8 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



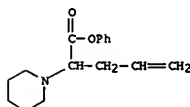
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 17 Nov 2003

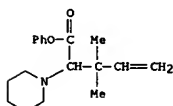
AB Ammonium salts containing side by side with β,γ -unsatd. aryl-, benzyl- or phenylethoxycarbonylmethyl groups under the action of sodium phenolates or alcohols are subjected to 3,2-sigmatropic rearrangement to afford α -dialkylaminopent-5-enoic esters. Similarly reacts under the same conditions dimethylfurfurylphenylethoxycarbonylmethylammonium chloride to afford exceptionally the Sommelet rearrangement product - NN-dimethyl- β -(α -methylfuryl)glycine Ph ether. Stevens rearrangement of ammonium salts containing phenylethoxycarbonylmethyl, and as a migrating group butyn-2-yl or 3-chlorobuten-2-yl group leads the same product - 2-dimethylamino-3-methyl-2,4-pentadienoic phenylethyl ester, which when treated with a diluted hydrochloric acid results in 3-methyl-2-oxo-3-pentenoic phenylethyl ester. The research showed that the nature of the basic agent and the solvent does not essentially affect the procedure and yields of Stevens rearrangement products. Study of antimicrobial activity of some synthesized salts showed that their 3% aqueous solns. exhibit a bactericidal effect on standard strains *Escherichia coli* (str. 1257) and *Staphylococcus aureus* (str. 906) depending on their chemical structure.

ACCESSION NUMBER: 2003:893585 CAPLUS
DOCUMENT NUMBER: 141:23239
TITLE: Stevens rearrangement of ammonium salts containing β,γ -unsaturated and aryl-, benzyl- or phenylethoxycarbonylmethyl groups
AUTHOR(S): Avakinyants, S. A.; Babakhanyan, A. V.; Akopyan, Sh. F.; Kocharyan, S. T.
CORPORATE SOURCE: Arm. Gos. Pedagog. Univ. im. H. Abovyan, Yerevan, Armenia
SOURCE: Hayastani Kimiakan Handes (2003), 56(3), 43-51
CODEN: KZARF3; ISSN: 1561-4190
PUBLISHER: Izdatel'stvo Gitutyun NAN Respubliki Armenii
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 141:23239
IT 697794-07-3P 697794-09-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(Stevens rearrangement of ammonium salts containing β,γ -unsatd. and aryl-, benzyl- or phenylethoxycarbonylmethyl groups)
RN 697794-07-3 CAPLUS
CN 1-Piperidineacetic acid, α -2-propenyl-, phenyl ester (9CI) (CA INDEX NAME)

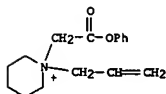


RN 697794-09-5 CAPLUS

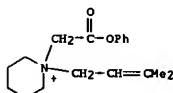
L8 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 1-Piperidineacetic acid, α -(1,1-dimethyl-2-propenyl)-, phenyl ester (9CI) (CA INDEX NAME)



IT 697794-06-2 697794-08-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(Stevens rearrangement of: Stevens rearrangement of ammonium salts containing β,γ -unsatd. and aryl-, benzyl- or phenylethoxycarbonylmethyl groups)
RN 697794-06-2 CAPLUS
CN Piperidinium, 1-(2-oxo-2-phenoxyethyl)-1-(2-propenyl)-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 697794-08-4 CAPLUS
CN Piperidinium, 1-(3-methyl-2-butenyl)-1-(2-oxo-2-phenoxyethyl)-, chloride (9CI) (CA INDEX NAME)

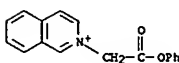
● Cl⁻

L8 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 27 May 2003

AB We studied the inhibiting effect and properties of adsorption layers formed by mols. of aryloxy-carbonyl-methyl-isoquinoline chlorides on iron surface. The compds. with alkyl chains having 6-18 carbon atoms differ in the inhibiting effect: the compds. with 10 carbon atoms in alkylphenol group provide better performance. Decaphenoxy-carbonylmethyl-isoquinoline chloride having the best performance characteristics was selected as an active base for the corrosion inhibitor of SNPH brand. Some threshold concentration of isoquinoline chloride (>15 mg/L) has to be increased to have guaranteed performance. The influence of solution concentration on inhibiting effect may be attributed to the specific layer formation and surface-active nature of mols. Decaphenoxy-carbonyl-methyl-isoquinoline chloride appeared to affect noticeably the kinetics of cathode process of oxidant reduction in corrosive medium. Anal. of chrono-potentiograms of corrosion process in the solns. containing decaphenoxy-carbonyl-methyl-isoquinoline chloride is given. Well regulated membranous coatings of isoquinoline chloride having high anticorrosive effect form in corrosive medium. Dynamics of coating formation on metal surface is shown. The laboratory exptl. data are compared with the results of the bench and pilot tests of the corrosion inhibitor carried out in the oil fields of West Siberia and Ural-Volga region.

ACCESSION NUMBER: 2003:400358 CAPLUS
DOCUMENT NUMBER: 139:136645
TITLE: Study of mechanism of heterocyclic nitrogen-containing corrosion inhibitors
AUTHOR(S): Ugryumov, O. V.; Lebedev, N. A.; Varnavskaya, O. A.; Ivshin, Y. V.
CORPORATE SOURCE: Research Department for Development of Demulsifiers and Corrosion Inhibitors, NIineftpromchim, Kazan, Russia
SOURCE: Progress in Mining and Oilfield Chemistry (2002), 4, 239-248
CODEN: PMOCMH; ISSN: 1585-1176
PUBLISHER: Akademicheskii Kiado
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 565418-55-5
RL: TEM (Technical or engineered material use); USES (Uses)
(p-alkyl derivs.; mechanism of heterocyclic nitrogen-containing corrosion inhibitors on iron surface in oil fields of West Siberia and Ural-Volga region)
RN 565418-55-5 CAPLUS
CN Isoquinolinium, 2-(2-oxo-2-phenoxyethyl)-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

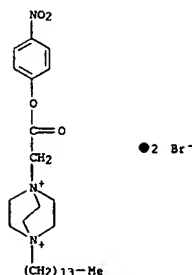
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

L8 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 02 Aug 2002
AB Artificial RNases of the ABLkCm series were synthesized. They consist of a lipophilic alkyl radical (Et, n-C14H29, or n-C15H31) [Acy], an "RNA-binding domain" [Vcy] (bisquaternary salt of 1,4-diazabicyclo[2.2.2]octane), a "catalytic domain" [Scylm] [histamine ([Scyl1)] or histidine ([Scyl3] residue), and a "linker" Lk that joins the "domains" B and Cm [here, k is the number of methylene units (one or three) in the linker]. The effect of the "domain structure" on the catalytic properties of the chemical RNases was analyzed using seven compds. of this series (AB1C1, AB13C1, AB13C3, AC1, AB, BL2, and BL3C3). The catalytic activity of the compds. was assessed in the reaction of hydrolysis of the in vitro transcripts of human tRNALys and yeast tRNAAsp under physiol. conditions. It was shown that only chemical RNases that involve all the fragments of the ABLkCm construct can hydrolyze the substrate tRNA at a high rate (90% of tRNA is hydrolyzed for 10 h at 37°[Scyl]). The activity of the compds. is largely determined by the presence of a long lipophilic radical linked to 1,4-diazabicyclo[2.2.2]octane and a long linker, which joins the RNA-hydrolyzing and RNA-binding domains. The results indicate an important role of hydrophobic interactions in the acceleration of the RNA hydrolysis reaction.

ACCESSION NUMBER: 2002:575812 CAPLUS
DOCUMENT NUMBER: 137:381573
TITLE: Chemical Ribonucleases: 4.1 An Analysis of the Domain Structure of Chemical Ribonucleases Based on 1,4-Diazabicyclo[2.2.2]octane
AUTHOR(S): Konevets, D. A.; Mironova, N. L.; Beck, I. E.; Zenkova, M. A.; Shishkin, G. V.; Vlassov, V. V.; Silnikov, V. N.
CORPORATE SOURCE: Novosibirsk Institute of Bioorganic Chemistry, Russian Academy of Sciences, Siberian Branch, Novosibirsk, 630090, Russia
SOURCE: Russian Journal of Bioorganic Chemistry (Translation of Bioorganicheskaya Khimiya) (2002), 28(4), 331-341 CODEN: RJBCET; ISSN: 1068-1620
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:381573
IT 475661-85-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(all domains of chemical RNase are required for efficient tRNA hydrolysis)
RN 475661-85-9 CAPLUS
CN 1,4-Diazabicyclo[2.2.2]octane, 1-[2-(4-nitrophenoxy)-2-oxoethyl]-4-tetradecyl-, dibromide (9CI) (CA INDEX NAME)

L8 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 05 Jul 2002
GI

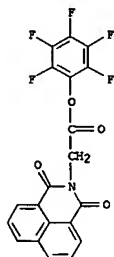
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A peptide nucleic acid (PNA) monomer represented by the following general formula A-(CH2)nCO-B [I; wherein A = O or Q1 (wherein X = OH, Z = O; X = NH2, Z = H2N+; or X = NMe2, Z = Me2N+), Q2, Q3, Q4 (wherein R = hydrogen, NO2, NH2, NHCbz, bromine, fluorine, chlorine, or SO3Na2), Q5, 3-(4-dimethylaminophenylazo)phenyl, 4-(4-dimethylaminophenylazo)phenylsulfonylethyl, 2-(4-hydroxyphenylazo)benzoylamino, 5-dimethylaminonaphthalenesulfonylamino, 1-pyrenecarbonyl, 1-pyrenylmethyl, 1-pyrenesulfonylamino, 6,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl, 4-methylcoumarin-7-ylaminocarbonyl, 4-trifluoromethylcoumarin-7-ylaminocarbonyl, 4-methyl-2-oxo-1,2-dihydroquinolin-7-ylaminocarbonyl, 2-oxo-1,2-dihydroquinolin-3-ylaminocarbonyl, etc.; B is OH, pentafluorophenyl, succinimidyl, N-carboxymethyl-N-[2-(tert-butoxycarbonylamino)ethyl]amino; n = an integer of 1 to 4] is prepared. A PNA monomer I [A, N = same as above; B = N-carboxymethyl-N-[2-(tert-butoxycarbonylamino)ethyl]amino] is prepared by amidation of an active ester I (A, n = same as above; B = pentafluorophenyl, succinimidyl, or N-carboxymethyl-N-[2-(tert-butoxycarbonylamino)ethyl]amino) with an amino acid derivative, in particular 2-[N-[2-(tert-butoxycarbonylamino)ethyl]amino]acetic acid (II). This process is convenient for the preparation of a photofunctional PNA monomer which is unstable under alkali condition. Thus, to a solution of 100 mg 2-(5,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl)acetic acid and 70.2 mg pentafluorophenol in 10 mL DMF was added 73.2 mg 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride (EDC) at 0° and stirred at 0° for 1 h and at room temperature for 12 h to give 85% 2,3,4,5,6-pentafluorophenyl 2-(5,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl)acetate (III). To a solution of the active ester III (100 mg) and 45.4 mg II in 10 mL DMF was added 36.3 µL diisopropylethylamine and stirred at room temperature for 15 h to give 85% 2-[N-[2-(tert-butoxycarbonylamino)ethyl]-2-[(5,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl)acetyl]amino]acetic acid.

ACCESSION NUMBER: 2002:504749 CAPLUS
DOCUMENT NUMBER: 137:79227
TITLE: Novel functional peptide nucleic acid monomer and process for producing the same
INVENTOR(S): Ikeda, Hisafumi; Saito, Isao; Kitagawa, Fumihiko
PATENT ASSIGNEE(S): Applied Biosystems Japan Ltd., Japan
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

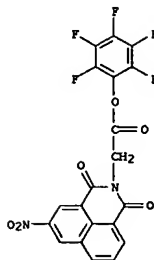
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051797	A1	20020704	WO 2001-JP8120	20010919
W:	JP, US			
RW:	AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR			

L8 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 EP 1357112 A1 20031029 EP 2001-970133 20010919
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI, CY, TR
 US 2004101839 A1 20040527 US 2003-250592 20031224
 JP 2000-394669 A 20001226
 WO 2001-398120 W 20010919
 PRIORITY APPLN. INFO.:
 OTHER SOURCE(S): CASREACT 137:79227; MARPAT 137:79227
 IT 439913-28-7P, [1,3-Dioxo-1H,3H-benz[de]isoquinolin-2-yl]acetic
 acid pentafluorophenyl ester 439913-30-1P, [5-Nitro-1,3-dioxo-
 1H,3H-benz[de]isoquinolin-2-yl]acetic acid pentafluorophenyl ester
 439913-33-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of novel functional peptide nucleic acid monomers by
 amidation
 of active esters with α -[N-(β -(tert-
 butoxycarbonylamino)ethyl)amino]acetic acid.)
 RN 439913-28-7 CAPLUS
 CN 1H-Benz[de]isoquinoline-2(3H)-acetic acid, 1,3-dioxo-, pentafluorophenyl
 ester (9CI) (CA INDEX NAME)

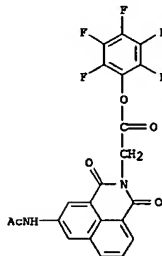


RN 439913-30-1 CAPLUS
 CN 1H-Benz[de]isoquinoline-2(3H)-acetic acid, 5-nitro-1,3-dioxo-,
 pentafluorophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 439913-33-4 CAPLUS
 CN 1H-Benz[de]isoquinoline-2(3H)-acetic acid, 5-(acetylamino)-1,3-dioxo-,
 pentafluorophenyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

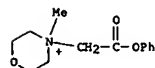
L8 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 19 Mar 2002
 AB Methods are disclosed for the synthesis of the iodinated halogenides of
 quaternary ammonium salts (Markush included). Comps. showed different
 pharmacol. activity such as tuberculostatic, antiulcer, antiviral,
 anthelmintic, at low levels of toxicity. The invention also describes
 iodinated quaternary ammonium halogenide-containing pharmaceutical compns.
 Synthesis of compds. is included.
 ACCESSION NUMBER: 2002:198055 CAPLUS
 DOCUMENT NUMBER: 136:241695
 TITLE: Preparation, pharmaceutical compositions, and
 pharmacological activity of iodinated quaternary
 ammonium halogenides
 INVENTOR(S): Pyshchev, A. I.; Konstantinchenko, A. A.; Zusman, A.
 I.
 PATENT ASSIGNEE(S): Russia
 SOURCE: Russ., No pp. given
 CODEN: RUXXE7
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2149866	C1	20000527	RU 1998-106094	19980326
PRIORITY APPLN. INFO.:			RU 1998-106094	19980326
OTHER SOURCE(S):			CASREACT 136:241695; MARPAT 136:241695	

IT 404824-50-6P
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
 activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic
 use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (iodinated quaternary ammonium halogenide preparation, pharmaceutical
 compns., and pharmacol. activity)
 RN 404824-50-6 CAPLUS
 CN Morpholinium, 4-methyl-4-(2-oxo-2-phenoxyethyl)-, (triiodide) (9CI) (CA
 INDEX NAME)

CM 1

CRN 404824-49-3
 CMF C13 H18 N O3



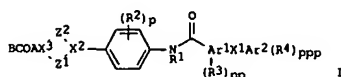
CM 2

CRN 14900-04-0
 CMF I3

L8 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

I-I-I

* L8 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
ED Entered STN: 15 Mar 2002
GI



AB Title compds. [I: Z1 = (CH2)n, CH2CH2O; n = 1-3; Z2 = (CH2)m; m = 1, 2; X1 = O, CH2, CO, NH, CH2S, bonds; X2, X3 = CH, N, C; R1 = H, alkyl; Ar1, Ar2 = (substituted) Ph, naphthalenyl, pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, triazinyl, triazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, pyrrolyl, furyl, thienyl; R2, R3 = alkyl, alkoxy, halo, CF3; R4 = alkyl, alkoxy, halo, OH, SH, cyano, NO2, alkylthio, polyhaloalkyl, amino, alkylamino, dialkylamino; p, pp = 0-2; ppp = 0-3; X1, R4 taken together with Ar1 and Ar2 to which they are attached = fluoren-1-yl, fluoren-4-yl; A = alkanediyl substituted with 1-2 aryl, heteroaryl, cycloalkyl; when X3 = CH, A may also = N substituted with H, alkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl, cycloalkyl; B = H, alkyl, aralkyl, heteroarylalkyl, (substituted) aryl, heteroaryl, etc.], and N-oxides thereof, were prepared. Thus, 4'-trifluoromethylbiphenyl-2-carboxylic acid was stirred 2 h with (COCl)2 in CH2Cl2 containing DMF; the resulting mixture was added to a mixture prepared from 4-(4-aminophenyl)-n-Ph-N-(2,2,2-trifluoroethyl)-1-piperazineacetamide (preparation given) and

Et3N in CH2Cl2 under ice/salt cooling followed by stirring and reflux for 2 days to give N-[4-[4-[2-oxo-1-phenyl-2-[(2,2,2-trifluoroethyl)amino]ethyl]-1-piperazinyl]phenyl]-4'-(trifluoromethyl)[1,1'-biphenyl]-2-carboxamide. The latter inhibited microsomal triglyceride transfer protein (MTF) activity with pIC50 = 7.864.

ACCESSION NUMBER: 2002:185098 CAPLUS

DOCUMENT NUMBER: 136:247608

TITLE: Preparation of piperidinyl-, piperazinyl-, and homopiperazinylpolyarylcaboxamides as lipid lowering agents

INVENTOR(S): Meerpoel, Lieven; Roevens, Peter Walter Maria; Backx, Leo Jacobus Jozef; Van der Veken, Louis Jozef

PATENT ASSIGNEE(S): Elisabeth; Viellevoe, Marcel

SOURCE: Janssen Pharmaceutica N.V., Belg.

PCT Int. Appl., 105 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE: English

LANGUAGE: English

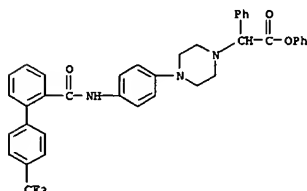
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020501	A2	20020314	WO 2001-EP9926	20010827
WO 2002020501	A3	20020627		

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

L8 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



●2 HCl

L8 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
ED Entered STN: 15 Mar 2002
GI

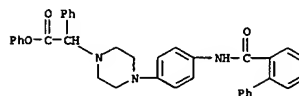
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, BR, CA, CH, CN, CY, CZ, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2421228 AA 20020314 CA 2001-2421228 20010827
AU 2002010468 A5 20020322 AU 2002-10468 20010827
EP 1317431 A2 20030611 EP 2001-978313 20010827

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

BR 2001014045 A 20030701 BR 2001-14045 20010827
JP 2004508361 T2 20040318 JP 2002-525123 20010827
NZ 524525 A 20040326 NZ 2001-524525 20010827
EE 200300080 A 20050215 EE 2003-80 20010827
BG 107581 A 20031128 BG 2003-107581 20030221
US 2004014971 A1 20040122 US 2003-363665 20030228
US 6878724 B2 20050412
ZA 2003001755 A 20040622 ZA 2003-1755 20030303
NO 2003001001 A 20030304 NO 2003-1001 20030304
HR 2003000156 A1 20030430 HR 2003-156 20030304
US 2005159402 A1 20050721 US 2005-29956 20050105
EP 2000-203067 A 20000904
WO 2001-EP9926 W 20010827
US 2003-363665 A3 20030228

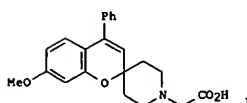
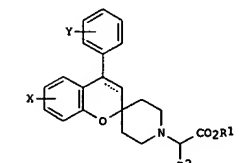
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 136:247608
IT 403989-08-2 403989-15-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of piperidinyl-, piperazinyl-, and homopiperazinylpolyarylcaboxamides as lipid lowering agents)
RN 403989-08-2 CAPLUS
CN 1-Piperazineacetic acid, 4-[4-[(1,1'-biphenyl)-2-ylcarbonyl]amino]phenyl]-α-phenyl-, phenyl ester, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 403989-15-1 CAPLUS
CN 1-Piperazineacetic acid, α-phenyl-4-[4-[(1,1'-biphenyl)-2-ylcarbonyl]amino]phenyl]-, phenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

L8 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 27 May 2001
GI



AB The title compds. [I: Y = 1-4 substituents selected from H, halo, alkyl, etc.; or Y = a fused aryl; X = 1-3 substituents selected from H, halo, OH, etc.; R1 = H, alkyl, aryl; R2 = H, alkyl] and their pharmaceutically acceptable salts which selectively inhibit the glycine transport by the human GlyT-1b transporter as compared to the human GlyT-2 transporter, and therefore are useful in the treatment of CNS disorders, were prepared. E.g., a multi-step synthesis of II.HCl was described. Biol. data for compds. I were given.

ACCESSION NUMBER: 2001:380589 CAPLUS
DOCUMENT NUMBER: 134:366809
TITLE: Preparation of spiro[2H-1-benzopyran-2,4'-piperidine] derivatives as glycine transport inhibitors
INVENTOR(S): Gibson, Samuel George; Miller, David John
PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036423	A1	20010525	WO 2000-EP11351	20001113

V: AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, MY, NZ, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, UG, US, VN, YU, ZA, AM, AZ, BY, BG, BR, CA, CH, CN, CY, CZ, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

L8 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

BJ, CF, CG, CI, CH, GA, GN, GV, ML, MR, NE, SN, TD, TG			
CA 2389491	AA 20010525	CA 2000-2389491	20001113
AU 2001015219	A5 20010530	AU 2001-15219	20001113
AU 779518	B2 20050127		
BR 2000015586	A 20020709	BR 2000-15586	20001113
EP 1232160	A1 20020821	EP 2000-977546	20001113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2003527340	T2 20030916	JP 2001-538912	20001113
NZ 518671	A 20031031	NZ 2000-518671	20001113
CZ 293920	B6 20040818	CZ 2002-1724	20001113
RU 2250211	C2 20050420	RU 2002-115862	20001113
ZA 2002003320	A 20030827	ZA 2002-3320	20020425
NO 2002002320	A 20020515	NO 2002-2320	20020515
US 6645973	B1 20031111	US 2002-130557	20020517
US 2004029904	A1 20040212	US 2003-637681	20030808
PRIORITY APPLN. INFO.:		EP 1999-309137	A 19991117
		WO 2000-EP11351	W 20001113
		US 2002-130557	A3 20020517

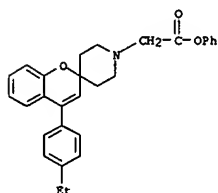
OTHER SOURCE(S): MARPAT 134:366809

IT 340267-49-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of spiro[2H-1-benzopyran-2,4'-piperidine] derivs. as glycine transport inhibitors)

RN 340267-49-4 CAPLUS

CN Spiro[2H-1-benzopyran-2,4'-piperidine]-1'-acetic acid, 4-(4-ethylphenyl)-, phenyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ED Entered STN: 13 Dec 2000

AB On the basis of imidazole and bisquaternary salts of 1,4-diazabicyclo[2.2.2]octane, a number of highly effective catalysts of the ndm series (here, n is the number of pos. charges at neutral pH values and m is the digital code of the catalytically active fragment: 1, histamine, and 2, histidine Me ester) were synthesized for the cleavage of phosphodiester bonds in ribonucleic acids. A general method for the synthesis of chemical RNases was suggested, which helps vary both the number of pos. charges in their RNA-binding domain and the catalytic center. By the example of hydrolysis under physiol. conditions of the in vitro transcript of tRNAlys from human mitochondria, it was shown that the RNA cleavage rate with the ndm conjugates increases approx. 30-fold along with the increase in the number of pos. charges from two to four.

ACCESSION NUMBER: 2000:871429 CAPLUS

DOCUMENT NUMBER: 134:189912

TITLE: Chemical ribonucleases: 3. The synthesis of organic catalysts for the phosphodiester bond hydrolysis on the basis of quaternary salts of 1,4-diazabicyclo[2.2.2]octane

AUTHOR(S): Konevets, D. A.; Beck, I. E.; Sil'nikov, V. N.; Zenkova, M. A.; Shishkin, G. V.

CORPORATE SOURCE: Novosibirsk Institute of Bioorganic Chemistry, Siberian Division, Russian Academy of Sciences, Novosibirsk, 630090, Russia

SOURCE: Russian Journal of Bioorganic Chemistry (Translation of Bioorganicheskaya Khimiya) (2000), 26(11), 765-773

CODEN: RJBCET; ISSN: 1068-1620

PUBLISHER: MAIK Nauka/Interperiodica

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:189912

IT 327189-89-9P 327189-91-3P 327189-96-8P

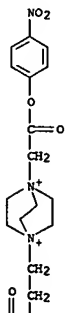
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of artificial RNases for phosphodiester bond hydrolysis of RNA on basis of quaternary salts of 1,4-diazabicyclo[2.2.2]octane)

RN 327189-89-9 CAPLUS

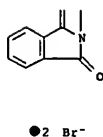
CN 1,4-Diazabicyclo[2.2.2]octane, 1-[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl]-4-[2-(4-nitrophenoxy)-2-oxoethyl]-, dibromide (9CI) (CA INDEX NAME)

L8 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



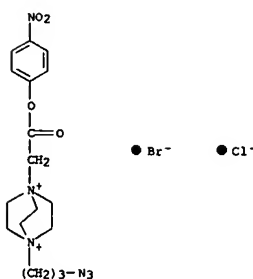
PAGE 2-A



RN 327189-91-3 CAPLUS

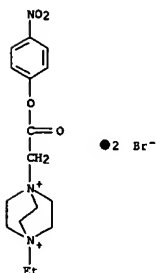
CN 1,4-Diazabicyclo[2.2.2]octane, 1-(3-azidopropyl)-4-[2-(4-nitrophenoxy)-2-oxoethyl]-, bromide chloride (9CI) (CA INDEX NAME)

L8 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 327189-96-8 CAPLUS

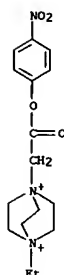
CN 1,4-Diazabicyclo[2.2.2]octane, 1-ethyl-4-[2-(4-nitrophenoxy)-2-oxoethyl]-, dibromide (9CI) (CA INDEX NAME)



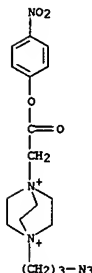
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 18 Oct 2000
 AB A procedure was proposed allowing one to synthesize RNase mimics on the basis of conjugates of diazabicyclo[2.2.2]octane with imidazole bearing a varying number of pos. charges (nBm series, where n is the number of pos. charges at neutral pH, m is the code of an imidazole-containing fragment of the catalytic domain: 1, histamine; 2, histidine Me ester). The hydrolytic activity of six compds. of this series was studied in physiol. conditions using in vitro transcript of human mitochondrial tRNA^{Ala} as a substrate. It was shown that the rate of RNA hydrolysis with nBm conjugates rises with an increase in the number of pos. charges: an approx. 30-fold acceleration of hydrolysis was observed with an increase in the total charge of the construct from +2 to +4.
 ACCESSION NUMBER: 2000:735652 CAPLUS
 DOCUMENT NUMBER: 133:360397
 TITLE: Chemical ribonucleases: 2. Design and hydrolytic activity of the ribonuclease mimics on the basis of diazabicyclo[2.2.2]octane with a differing number of positive charges
 AUTHOR(S): Zenkova, M. A.; Vlassov, A. V.; Konevets, D. A.; Simakov, V. N.; Giege, R.; Vlassov, V. V.
 CORPORATE SOURCE: Novosibirsk Institute of Bioorganic Chemistry, Siberian Division, Russian Academy of Sciences, Novosibirsk, 630090, Russia
 SOURCE: Russian Journal of Bioorganic Chemistry (Translation of Bioorganicheskaya Khimiya) (2000), 26(9), 610-615
 CODEN: RJBCET; ISSN: 1068-1620
 PUBLISHER: MAIK Nauka/Interperiodica
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 307305-05-1P 307305-06-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (design and hydrolytic activity of RNase mimics based on diazabicyclo[2.2.2]octane and containing various number of pos. charges)
 RN 307305-05-1 CAPLUS
 CN 1,4-Diazoniabicyclo[2.2.2]octane, 1-ethyl-4-[2-(4-nitrophenoxy)-2-oxoethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 307305-06-2 CAPLUS
 CN 1,4-Diazoniabicyclo[2.2.2]octane, 1-(3-azidopropyl)-4-[2-(4-nitrophenoxy)-2-oxoethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 22 Sep 2000
 GI



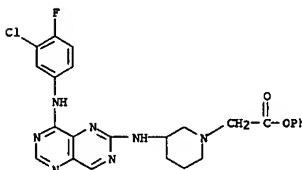
AB Title compds. [I; Ra = H, alkyl; Rb = (substituted) Ph, PhCH2, PhCH2CH2; XY = N:C(AB)CH:CH, CH:NC(AB)CH, N:C(AB)NCH, etc.; A = alkyleneoxy, cycloalkyleneoxy, (substituted) alkyleneimino, cycloalkyleneimino, azetidylene, piperidinyleno, piperazinyleno, etc.; B = R6O2CALNR5, etc.; R5 = H, (substituted) alkyl, cycloalkyl, cycloalkylalkyl; A1 = (substituted) alkylene; R6 = H, (substituted) alkyl, cycloalkyl, alkenyl, alkynyl, cycloalkylalkyl, etc.], were prepared. Thus, 4-[[3-chloro-4-fluorophenyl]amino]-6-[[1-[(methoxycarbonyl)methyl]piperidin-4-yl]amino]pyrimido[5,4-d]pyrimidine was stirred with aqueous NaOH in THF to give 96% 4-[[3-chloro-4-fluorophenyl]amino]-6-[[1-[(carboxymethyl)methyl]piperidin-4-yl]amino]pyrimido[5,4-d]pyrimidine. I inhibited EGF-dependent proliferation of F/L-HERC cells with IC50 = 7-2510 nM.

ACCESSION NUMBER: 2000:666735 CAPLUS
 DOCUMENT NUMBER: 133:238019
 TITLE: Preparation of aminopyrimidopyrimidines and related compounds as inhibitors of epidermal growth factor receptor-mediated cell proliferation.
 INVENTOR(S): Himmelsbach, Frank; Langkopf, Elke; Blech, Stefan; Jung, Birgit; Metz, Thomas; Solca, Flavio
 PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
 SOURCE: PCT Int. Appl., 137 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

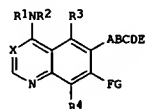
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055162	A2	20000921	WO 2000-EP2229	20000314
WO 2000055162	A3	20001228		
W:	AB, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LF, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, GW, ML, MR, NE, SH, TO, TG			
DE 19911510	A1	20000921	DE 1999-19911510	19990315
CA 2361770	AA	20000921	CA 2000-2361770	20000314
EP 1163242	A2	20011219	EP 2000-920498	20000314
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

L8 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 JP 2002539214 T2 20021119 JP 2000-605591 20000314
 US 2002082420 A1 20020627 US 2001-933597 20010821
 PRIORITY APPLN. INFO.: DE 1999-19911510 A 19990315
 WO 2000-EP2229 W 20000314

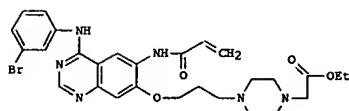
OTHER SOURCE(S): MARPAT 133:238019
 IT 294181-23-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study; unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of aminopyrimidopyrimidines and related compds. as inhibitors of epidermal growth factor receptor-mediated cell proliferation)
 RN 294181-23-0 CAPLUS
 CN 1-Piperidineacetic acid, 3-[[8-[(3-chloro-4-fluorophenyl)amino]pyrimido[5,4-d]pyrimidin-2-yl]amino]-, phenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 10 Sep 2000
GI



I



II

AB Title compds. [I: R1 = H, C1-C4-alkyl; R2 = (un)substituted Ph, benzyl, 1-phenylethyl; R3, R4 independently = H, F, Cl, CH3O, CH3OCH2, (CH3)2NCH2, (CH3CH2)2NCH2, pyrrolidino, piperidino, morpholino; X = C(CN), N; A = O, NH, (C1-C4)-alkyl; B = CO, SO2; C = 1,3-allenylene, 1,1-vinylene, 1,2-vinylene, 1,3-butadien-1,4-ylene, with CH3, CF3 substitution; D = alkylene, CO-alkylene, SO2-alkylene; CO, SO2; E = HOCO(CH2)nNR5, (HO)2P(=O)(CH2)nNR5; n = 1-6; R5 = H, alkyl], tautomers, stereoisomers, and physiol. acceptable salts are prepared and having valuable pharmacol. properties, particularly an inhibiting effect on signal transduction mediated by tyrosine kinases. Title compds. are useful for treating tumoral diseases, diseases of the lungs and respiratory tract. Thus, the title compound II was prepared and tested by Cell Titer 96TM Aqueous Nonradioactive Cell Proliferation Assay.

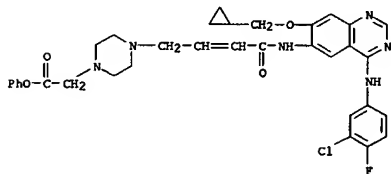
ACCESSION NUMBER: 2000:628125 CAPLUS
DOCUMENT NUMBER: 133:207919

TITLE: Preparation of 4-amino-quinazoline and quinoline derivatives having an inhibitory effect on signal transduction mediated by tyrosine kinases useful for treating tumoral diseases, lung and respiratory tract diseases

INVENTOR(S): Himmelsbach, Frank; Langkopf, Elke; Jung, Birgit;

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
SOURCE: PCT Int. Appl., 232 pp.

L8 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CODEN: PIXK02
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

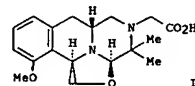
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000051991	A1	20000908	WO 2000-EP1496	20000224
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19908567	A1	20000831	DE 1999-19908567	19990227
DE 19911366	A1	20000921	DE 1999-19911366	19990315
DE 19928306	A1	20001228	DE 1999-19928306	19990621
DE 19954816	A1	20010517	DE 1999-19954816	19991113
CA 2361174	AA	20000908	CA 2000-2361174	20000224
EP 1157011	A1	20011128	EP 2000-910695	20000224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000008524	A	20011218	BR 2000-8524	20000224
JP 2002538145	T2	20021112	JP 2000-602218	20000224
JP 3751201	B2	20060301		
EE 200100449	A	20021216	EE 2001-449	20000224
BG 105765	A	20020329	BG 2001-105765	20010801
HR 2001000617	A1	20021031	HR 2001-617	20010823
NO 2001004114	A	20011015	NO 2001-4114	20010824
US 6972288	B1	20051206	US 2002-914323	20020228
PRIORITY APPLN. INFO:			DE 1999-19908567	A 19990227
			DE 1999-19911366	A 19990315
			DE 1999-19928306	A 19990621
			US 1999-149329P	P 19990817
			DE 1999-19954816	A 19991113
			WO 2000-EP1496	W 20000224

OTHER SOURCE(S): MARPAT 133:207919

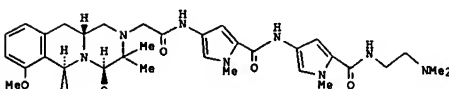
IT 290303-06-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminoquinazoline and aminoquinoline deriva. having an inhibitory effect on signal transduction mediated by tyrosine kinases useful for treating tumoral diseases, lung and respiratory tract diseases)
RN 290303-06-9 CAPLUS
CN 1-Piperazineacetic acid, 4-[4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopropylmethoxy)-6-quinazolinyl]amino]-4-oxo-2-butenyl]-, phenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 09 Mar 2000
GI



I



II

AB The efficient synthesis of a water-soluble C11a-epi-analog I of quinocarcin is described. This substance, and a netropsin amide conjugate II lack the capacity to inflict oxidative damage on DNA due to the stereoelectronic geometry of their oxazolidine nitrogen atoms. The capacity of these substances to alkylate DNA through the generation of an iminium species has been examined. Both compds. were found to be unreactive as DNA alkylating agents. The results of this study are discussed in the context of previous proposals on the mode of action of this family of antitumor alkaloids.

ACCESSION NUMBER: 2000:157026 CAPLUS
DOCUMENT NUMBER: 133:4837

TITLE: Synthesis of a netropsin conjugate of a water-soluble epi-quinocarcin analogue: the importance of stereochemistry at nitrogen

AUTHOR(S): Herberich, B.; Scott, J. D.; Williams, R. M.
CORPORATE SOURCE: Department of Chemistry, Colorado State University, Fort Collins, CO, USA

SOURCE: Bioorganic & Medicinal Chemistry (2000), 8(3), 523-532
CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal

LANGUAGE: English
IT 165253-50-9P

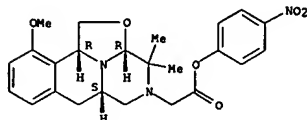
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of a netropsin conjugate of a water-soluble epi-quinocarcin analog and the importance of stereochem. at nitrogen)

RN 165253-50-9 CAPLUS

CN 2-Oxa-4,10c-diazaceanthrylene-4(1H)-acetic acid, 2a,3,5,6,10b-hexahydro-10-methoxy-3,3-dimethyl-, 4-nitrophenyl ester, (2aR,5aS,10bR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

* L8 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 31 May 1999

AB N,N-Disubstituted 2-aminoalk-2-enals react with alkyl- or aryl-thiols to give unexpected thioesters of α-amino acid in good yields. The same type of product is formed when substrate is treated with ethane-1,2-dithiol. The reaction proceeds via an intermediate 1,2-adduct which is transformed, after a 1,3-shift, into the final thioester.

ACCESSION NUMBER: 1999:333941 CAPLUS
DOCUMENT NUMBER: 131:170604

TITLE: New convenient access to thioesters of α-amino acids from N,N-disubstituted 2-aminoalk-2-enals
AUTHOR(S): Rulev, Alexandre Yu.; Larina, Lyudmila I.; Keiko, Natalia A.; Voronkov, Mikhail G.

CORPORATE SOURCE: Siberian Branch, Institute of Chemistry, Russian Academy of Sciences, Irkutsk, 664033, Russia
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1999), (11), 1567-1570

CODEN: JCPRB4; ISSN: 0300-922X
PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

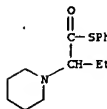
OTHER SOURCE(S): CASREACT 131:170604

IT 238420-03-6P

RI: SPN (Synthetic preparation); PREP (Preparation)
(preparation of from N,N-disubstituted 2-aminoalk-2-enals reacted with thiols)

RN 238420-03-6 CAPLUS

CN 1-Piperidineethanethioic acid, α-ethyl-, S-phenyl ester (9CI) (CA INDEX NAME)

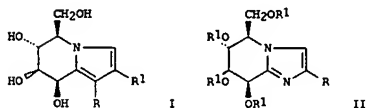


REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 05 Sep 1997

GI



AB In the presence of activating agents, the N-acylglycine I reacts with electrophilic alkynes via a munchnone (oxazolium-5-olate) to pyrrolopyridines (indolizines). Depending on the nature of the activating agent and the reaction temperature, the formation of the pyrroles was accompanied by partial epimerization to manno-configured epimers. A gluco-configured pyrrolopyridine was deprotected to tetrol I (R, R1 = CO2Me). Silylation of the latter, followed by reduction and desilylation, gave the hexol I (R, R1 = CH2OH). Cycloaddn. of the intermediary munchnone to 4-MeCGH4SO2CN yielded the imidazole II (R = 4-MeCGH4SO2, R1 = PhCH2; 53% yield), while cycloaddn. to PhOCN gave the phenoxymidazole II (R = PhO, R1 = PhCH2) in low yields only. As expected, the deprotected pyrroles I (R = R1 = CO2Me, CH2OH; R = H, R1 = CO2Me; R = CO2Me, R1 = H) are weak inhibitors of retaining β-glucosidases, while II (R = 4-MeCGH4SO2, R1 = H) proved a good inhibitor of sweet-almond β-glucosidase and a powerful inhibitor of Caldocellum saccharolyticum β-glucosidase.

ACCESSION NUMBER: 1997:568920 CAPLUS

DOCUMENT NUMBER: 127:278174

TITLE: Synthesis via a carbohydrate-derived munchnone of pyrrolopyridines (indolizines) and imidazopyridines, and their evaluation as inhibitors of β-D-glucosidases

AUTHOR(S): Granier, Thierry; Gaiser, Florian; Hintermann, Lukas; Vassella, Andrea

CORPORATE SOURCE: Laboratorium Organische Chemie, Eidgenossische Technische Hochschule Zurich, Zurich, CH-8092, Switz.

SOURCE: Helvetica Chimica Acta (1997), 80(5), 1443-1456
CODEN: HCACAV; ISSN: 0018-019X

PUBLISHER: Verlag Helvetica Chimica Acta

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 127:278174

IT 196412-52-9P

RI: SPN (Synthetic preparation); PREP (Preparation)
(preparation and glucosidase inhibitory activity of carbohydrate-derived pyrrolo- and imidazopyridines)

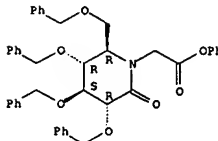
RN 196412-52-9 CAPLUS

CN 1-Piperidineacetic acid, 2-oxo-3,4,5-tris(phenylmethoxy)-6-[(phenylmethoxymethyl)-, phenyl ester, [3R-(3a,4β,5a,6.b eta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

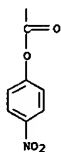
L8 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



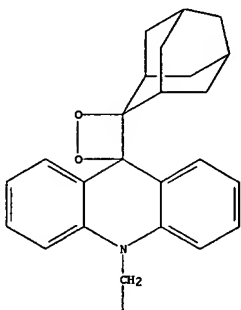
L8 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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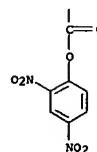
RN 188002-48-4 CAPLUS
 CN Dispiro[acridine-9(10H),3'-[1,2]dioxetane-4',2''-tricyclo[3.3.1.1^{3,7}]decane]-10-acetic acid, 2,4-dinitrophenyl ester (9CI) (CA INDEX NAME)

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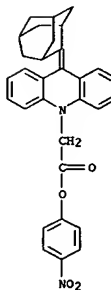


L8 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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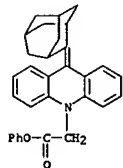


IT 178313-00-3P 178313-01-4P 188002-39-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, thermal stability, and chemiluminescence of 1,2-dioxetanes containing an acridane acetate moiety)
 RN 178313-00-3 CAPLUS
 CN 10(9H)-Acridineacetic acid, 9-tricyclo[3.3.1.1^{3,7}]decylidene-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

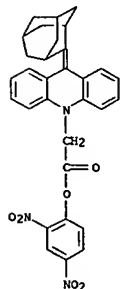


RN 178313-01-4 CAPLUS
 CN 10(9H)-Acridineacetic acid, 9-tricyclo[3.3.1.1^{3,7}]decylidene-, phenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

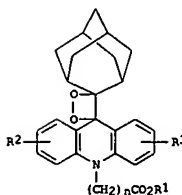


RN 188002-39-3 CAPLUS
 CN 10(9H)-Acridineacetic acid, 9-tricyclo[3.3.1.1^{3,7}]decylidene-, 2,4-dinitrophenyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 12 Jul 1996
 GI

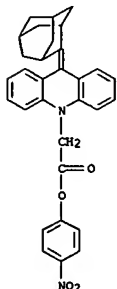


AB The title compds. I [n = 1 - 3; R1 = H, alkyl, etc.; R2, R3 = H, nitro, etc.] are prepared I [R2 = R3 = H; n = 1; R1 = 4-nitrophenyl] (II) (preparation given) showed chemiluminescence. II showed good storage stability.
 ACCESSION NUMBER: 1996:401584 CAPLUS
 DOCUMENT NUMBER: 125:58346
 TITLE: Preparation of acridine derivatives as chemiluminescent compounds
 INVENTOR(S): Imanishi, Takeshi; Hoshino, Nobuhiro; Shimamoto, Kazutoshi
 PATENT ASSIGNEE(S): Iatron Lab., Japan; Mitsubishi Chemical Yatron Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

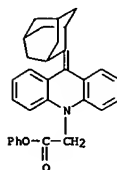
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08092254	A2	19960409	JP 1994-254730	19940923
JP 3551984	B2	20040811		

PRIORITY APPL. INFO.: MARPAT 125:58346
 OTHER SOURCE(S):
 IT 178313-00-3P 178313-01-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of acridine derivs. as chemiluminescent compds.)
 RN 178313-00-3 CAPLUS
 CN 10(9H)-Acridineacetic acid, 9-tricyclo[3.3.1.1^{3,7}]decylidene-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

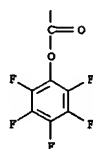


RN 178313-01-4 CAPLUS
 CN 10(9H)-Acridineacetic acid, 9-tricyclo[3.3.1.1.3,7]decylidene-, phenyl ester (9CI) (CA INDEX NAME)



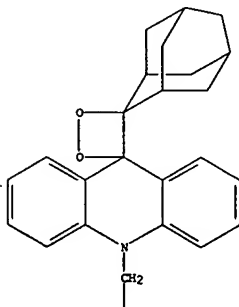
IT 178312-95-3P 178312-96-4P 178312-97-5P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of acridine derivs. as chemiluminescent compds.)
 RN 178312-95-3 CAPLUS
 CN Dispiro[acridine-9(10H),3'-[1,2]dioxetane-4',2''-tricyclo[3.3.1.1.3,7]decane]-10-acetic acid, phenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

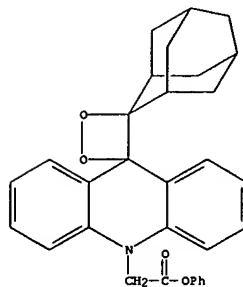


RN 178312-97-5 CAPLUS
 CN Dispiro[acridine-9(10H),3'-[1,2]dioxetane-4',2''-tricyclo[3.3.1.1.3,7]decane]-10-acetic acid, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

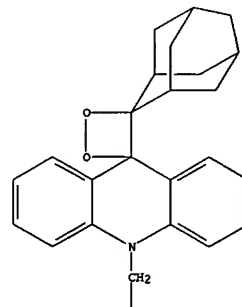


L8 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

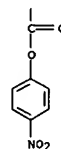


RN 178312-96-4 CAPLUS
 CN Dispiro[acridine-9(10H),3'-[1,2]dioxetane-4',2''-tricyclo[3.3.1.1.3,7]decane]-10-acetic acid, pentafluorophenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

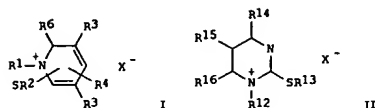


L8 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



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L8 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 17 Aug 1995
GI



AB The compds. consist of I [R1 = (substituted) alkyl, (substituted) phenyl; R2 = (substituted) Ph, alkyl group having substituted C at α -position of S; R3, R4, R5, R6 = H, halo, alkyl, alkoxy, cyano, nitro, Ph, COOR7, COR8, OCOR9, CONR10R11 (R5 and R6 may form aromatic ring); X = organic or inorg. anionic residual group; R7, R8, R9, R10, R11 = H, alkyl, Ph, benzyl] or II [R12 = (substituted) alkyl; R13 = alkyl group having substituted C at α -position of S; R14, R15, R16 = H, nitro, Ph, COOR17, COR18, OCOR19; CONR20R21; X = organic or inorg. anionic residual group; R17, R18, R19, R20, R21 = H, alkyl, Ph, benzyl]. A composition containing

ERL-4221 (epoxy resin) and N-cinnamyl-2-(ethoxycarbonylmethylthio)pyridinium hexafluoroantimonate was heated at 10°/min to give a cured resin with differential calorimetric peak temperature 159°.

ACCESSION NUMBER: 1995:740929 CAPLUS

DOCUMENT NUMBER: 123:145609

TITLE: Onium salt compounds for rapid curing of cationically polymerizable compounds and their use as polymerization initiators

INVENTOR(S): Takahashi, Elji; Muramoto, Hiroo

PATENT ASSIGNEE(S): Nippon Soda Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKKXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07025852	A2	19950127	JP 1993-197030	19930714
PRIORITY APPL. INFO.:			JP 1993-197030	19930714

OTHER SOURCE(S): MARPAT 123:145609

IT 166440-19-3P 166889-00-5P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

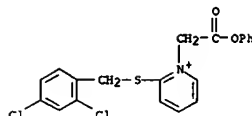
(initiator; for rapid curing of cationically polymerizable compds.)

RN 166440-19-3 CAPLUS

CN Pyridinium, 2-[[[(2,4-dichlorophenyl)methyl]thio]-1-(2-oxo-2-phenoxylethyl)-, bromide (9CI) (CA INDEX NAME)

L8 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L8 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● Br⁻

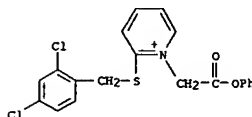
RN 166889-00-5 CAPLUS

CN Pyridinium, 2-[[[(2,4-dichlorophenyl)methyl]thio]-1-(2-oxo-2-phenoxylethyl)-, (OC-6-11)-hexafluoroantimonate(1-) (9CI) (CA INDEX NAME)

CH 1

CRN 166440-30-8

CMF C20 H16 Cl2 N O2 S

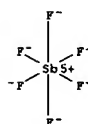


CH 2

CRN 17111-95-4

CMF F6 Sb

CCI CCS



L8 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 09 Jun 1995

AB Quinocarcin is the simplest of the bioxalmycin/naphthyridinomycin/tetrazomine/saframycin class of antitumor antibiotics, which damage DNA in a process that is inhibited by superoxide dismutase (SOD). The oxazolidine moiety of this class of antitumor antibiotics undergoes a redox self-disproportionation reaction of the Cannizzaro type. The reaction is proposed to proceed via an intermediate carbon-centered radical, which then reduces mol. oxygen to give superoxide. We set out to determine whether

the DNA-cleavage properties of these antitumor antibiotics could be retained in less complex analogs of quinocarcin. A totally synthetic, water-soluble analog of quinocarcin has been prepared. This analog produced superoxide, but had considerably reduced ability to cleave supercoiled circular DNA compared to quinocarcin or tetrazomine. When conjugated to the DNA-binding mol. spermine, however, it cleaved DNA as effectively as quinocarcin at less than 1/10 the concentration. A conjugate with netropsin displayed selective cleavage around the sequence 5'-d(ATT)-3'. Mol. modeling of the interaction between the conjugate and DNA, together with the pattern of cleavage, indicates that a non-diffusible oxidant is involved in sequence-selective DNA cleavage. The spermine conjugate displayed weak antimicrobial activity. Knowledge of the stereoelectronic requirements for superoxide production by quinocarcin has allowed us to design

a structurally less complex analog which has many of the same phys. properties, including water solubility, the ability to produce superoxide and the ability to cleave DNA. Covalently attaching known DNA-binding mols. to this analog gave a compound that produced sequence-specific DNA damage. Our results suggest that a mechanism other than superoxide production can mediate DNA damage by the netropsin conjugate.

ACCESSION NUMBER: 1995:599848 CAPLUS

DOCUMENT NUMBER: 123:74302

TITLE: Netropsin and spermine conjugates of a water-soluble quinocarcin analog: Analysis of sequence-specific DNA interactions

AUTHOR(S): Flanagan, Mark E.; Rollins, Samuel B.; Williams, Robert M.

CORPORATE SOURCE: Department Chemistry, Colorado State University, Ft. Collins, CO 80523, USA

SOURCE: Chemistry & Biology (1995), 2(3), 147-56

CODEN: CBOLE2; ISSN: 1074-5521

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 165253-50-9P

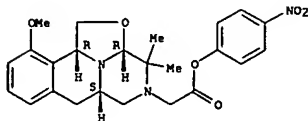
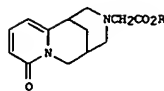
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of netropsin and spermine conjugates of a water-soluble quinocarcin analog and anal. of sequence-specific DNA damage)

RN 165253-50-9 CAPLUS

CN 2-Oxa-4,10c-diazaaceanthrylene-4(1H)-acetic acid, 2a,3,5,6a,6,10b-hexahydro-10-methoxy-3,3-dimethyl-, 4-nitrophenyl ester, (2aR,5aS,10bR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

* L8 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L8 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 26 Apr 1995
GI

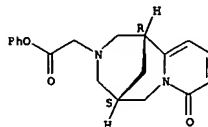
I

AB Title esters I (R = Me, Et, Pr, Bu, Ph) were prepared by reaction of cytosine with ClCH₂CO₂R in the presence of K₂CO₃. The oxalate salts of I were also prepared

ACCESSION NUMBER: 1995:510830 CAPLUS
DOCUMENT NUMBER: 123:56346
TITLE: Synthesis and structure of N-cytosinylacetic acid esters
AUTHOR(S): Nurkenov, O. A.; Gazaliev, A. M.; Zhakina, A. Kh.; Zhurinov, M. Zh.
CORPORATE SOURCE: Inst. Org. Sint. Ugolekhim., Karaganda, Kazakhstan
SOURCE: Izvestiya Natsional'noi Akademii Nauk Respubliki Kazakhstan, Seriya Khimicheskaya (1994), (2), 74-7
CODEN: INRKES
PUBLISHER: Gylm
DOCUMENT TYPE: Journal
LANGUAGE: Russian

IT 163778-14-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and conversion to oxalate salt)
RN 163778-14-1 CAPLUS
CN 1,5-Methano-2H-pyrido[1,2-a][1,5]diazocine-3(4H)-acetic acid, 1,5,6,8-tetrahydro-8-oxo-, phenyl ester, (1R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



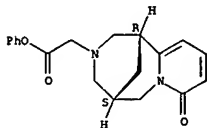
IT 163879-32-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 163879-32-1 CAPLUS
CN 1,5-Methano-2H-pyrido[1,2-a][1,5]diazocine-3(4H)-acetic acid,

L8 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
1,5,6,8-tetrahydro-8-oxo-, phenyl ester, (1R)-, ethanedioate (1:1) (9CI)
(CA INDEX NAME)

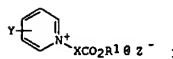
CH 1

CRN 163778-14-1
CHF C19 H20 N2 O3

Absolute stereochemistry.



CH 2

CRN 144-62-7
CHF C2 H2 O4L8 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 02 Oct 1993
GI

AB New electrostatog. toners and developers are provided containing novel charge control agents comprising ester-containing quaternary pyridinium salts having structure (I), wherein R1 is alkyl or acyl, X is -(CH₂)_n, Y is H, alkyl, alkoxy or halogen, Z0 is an anion and n is an integer from 1 to 6. Such ester-containing quaternary pyridinium salts also cause toner particles containing them to display lower fusing temps. and improved paper adhesion indexes.

ACCESSION NUMBER: 1993:549452 CAPLUS
DOCUMENT NUMBER: 119:149452
TITLE: Toners and developers containing ester-containing quaternary pyridinium salts as charge control agents
INVENTOR(S): Wilson, John Charles; Bernel, Alexandra DiLauro
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

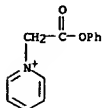
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9302397	A1	19930204	WO 1992-US5961	19920716
W: JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
EP 548348	A1	19930630	EP 1992-915992	19920716
EP 548349	B1	19960320		
R: BE, DE, FR, GB, NL				
JP 06501788	T2	19940224	JP 1993-502953	19920716
PRIORITY APPLN. INFO.:			US 1991-734354	A 19910718
			WO 1992-US5961	W 19920716

OTHER SOURCE(S): MARPAT 119:149452
IT 149639-25-8 149639-30-5
RL: USES (Uses)
(as charge control agent in electrostatog. developer)
RN 149639-25-8 CAPLUS
CN Pyridinium, 1-(2-oxo-2-phenoxylethyl)-, salt with 3-nitrobenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

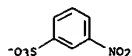
CH 1

CRN 149639-24-7
CHF C13 H12 N O2

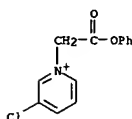
L8 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

CRN 30904-40-6
CMF C6 H4 N O5 SRN 149639-30-5 CAPLUS
CN Pyridinium, 3-chloro-1-(2-oxo-2-phenoxyethyl)-, tetraphenylborate(1-)
(9CI) (CA INDEX NAME)

CM 1

CRN 149639-29-2
CMF C13 H11 Cl N O2

CM 2

CRN 4358-26-3
CMF C24 H20 B
CCI CCSL8 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 18 Sep 1993
GI

AB The above salts are I [R1 = alkyl, aryl; X = Cl-6-alkylene; Y = H, alkyl, alkoxy, halogen; Z- = anion]. The salts are used advantageously in charge control agents in electrophotog. toners and developers. The toner particles containing above salts have lower fusing temperature and improved paper

adhesion indexes.

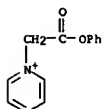
ACCESSION NUMBER: 1993:528375 CAPLUS
DOCUMENT NUMBER: 119:128375
TITLE: Ester-containing quaternary pyridinium salts
INVENTOR(S): Wilson, John Charles; Bernel, Alexandra DiLauro
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

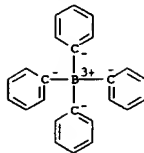
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9302053	A1	19930204	WO 1992-US5966	19920716
W: JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
US 5196538 A 19930323 US 1991-734353 19910718				
PRIORITY APPLN. INFO.: US 1991-734353 A 19910718				
OTHER SOURCE(S): MARPAT 119:128375				
IT 149639-25-8 149639-30-5				
RL: USES (Uses)				
(as charge control agent for electrophotog. toners)				
RN 149639-25-8 CAPLUS				
CN Pyridinium, 1-(2-oxo-2-phenoxyethyl)-, salt with 3-nitrobenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)				

CM 1

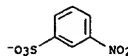
CRN 149639-24-7
CMF C13 H12 N O2

L8 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

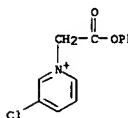


L8 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

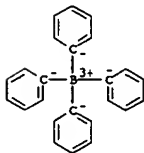
CM 2

CRN 30904-40-6
CMF C6 H4 N O5 SRN 149639-30-5 CAPLUS
CN Pyridinium, 3-chloro-1-(2-oxo-2-phenoxyethyl)-, tetraphenylborate(1-)
(9CI) (CA INDEX NAME)

CM 1

CRN 149639-29-2
CMF C13 H11 Cl N O2

CM 2

CRN 4358-26-3
CMF C24 H20 B
CCI CCS

L8 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 16 Feb 1993

AB GXC: NOCOQAQALCOZ: CX1G1 [I; A, A1 = O, NH, CH2O, CH2CH2O, bond; G, G1 = CONR1R2, CO2R3, COR4, S(O)nR5, SO2NR1R2, cyano; X, X1 = SO2R6, Cl, Br; R1, R2 = H, C1-4 alkoxyalkyl; NR1R2 = (mon- or dimethyl)azetidino, -pyrrolidino, -piperidino, -homopiperidino, -morpholino; R3 = C1-4 alkyl, C1-4 haloalkyl, C2-4 alkoxyalkyl; R4, R5 = C1-4 alkyl, C1-4 haloalkyl, C2-4 alkoxyalkyl, (substituted) Ph; R6 = C1-6 alkyl, C1-6 haloalkyl, C2-6 alkoxyalkyl, (substituted) Ph, benzyl; Q = (substituted) C1-6 alkylene, C2-6 alkenylene, C2-6 alkyneylene, (substituted) phenylene, -naphthylene, -cycloalkylene, -1-methylpyrrolylene, -1-methylimidazolylene, (substituted) 5-10 membered heteroarylene; n = 0-2; with provisos] were prepared as agrochem. fungicides. Thus, isophthaloyl chloride was added to a solution of Me2NOC(=NOH)Cl in THF. Et3N in THF was added to this

solution at 0° and the mixture was stirred for 5 h at room temperature to give I (G, G1 = CONMe2; X, X1 = Cl; Q = 1,3-phenylene; A, A1 = bond) (II). II as a 200 ppm foliar spray gave 100% control of Venturia inaequalis on apples, Puccinia recondita on wheat, Phytophthora infestans on tomatoes, and Plasmopara viticola on grapes.

ACCESSION NUMBER: 1993:59423 CAPLUS

DOCUMENT NUMBER: 118:59423

TITLE: Preparation of arylene bis(carbonyloximinocarbonylimido

doyl chlorides) as agrochemical fungicides

INVENTOR(S): Drumm, Joseph Eugene, III

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: PCT Int. Appl., 179 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9202491	A1	19920220	WO 1991-US5579	19910806
W: AU, BR, HU, JP, KR, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9183263	A1	19920302	AU 1991-83263	19910806
CN 1059713	A	19920325	CN 1991-108854	19910806
PRIORITY APPLN. INFO.:			US 1990-563839	A2 19900806
			WO 1991-US5579	A 19910806

OTHER SOURCE(S): MARPAT 118:59423

IT 142718-99-8P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as agrochem. fungicide)

RN 142718-99-8 CAPLUS

CN Morpholine, 4,4'-[[1,3-phenylenebis(carbonyloxynitrilo[2-[(4-chlorophenyl)sulfonyl]-1-oxo-2,1-ethanediyl]]bis[2,6-dimethyl- (9CI) (CA INDEX NAME)

L8 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 28 Nov 1992

AB GC:(NOA)SO2R1 [I; G = C(=L)NR2R3, CO2R4, SO2NR2R3, S(O)nR5; L = O, S; A = H, CO2R6, CONHR7, CO(CH2)nR8, SO2R14; R1 = (substituted) C1-8 alkyl, C3-6 cycloalkyl, C1-2 alkyl substituted by Ph, naphthyl, heterocyclyl; (substituted) Ph, -naphthyl, -heterocyclyl; R2,R3 = H, C1-6 (halo)alkyl, C2-6 alkoxyalkyl, C3-4 alkenyl, C3-4 haloalkenyl; NR2R3 = (mono- or dimethyl) pyrrolidino, -piperidino, -morpholino; R4 = C1-8 alkyl, C1-8 haloalkyl, C3-6 alkoxyalkyl, C3-6 (halo)alkenyl; R5, R14 = C1-6 (halo)alkyl, C2-6 alkoxyalkyl, (substituted) Ph, -benzyl; R6 = (substituted) C1-6 alkyl, C3-6 cycloalkyl, C1-2 alkyl substituted by Ph or naphthyl, etc.; R7 = (substituted) Ph, -benzyl, -naphthalenyl, etc.; R8 = (substituted) Ph, -naphthyl, heterocyclyl; n, m = 0-2] were used prepared as agrochem. fungicides. Thus, Et chlorooximidoacetate and benzylmercaptan were condensed in the presence of Et3N to give Et 2-(benzylthio)-2-hydroxyiminoacetate. This was oxidized by potassium peroxydisulfate to give I [G = CO2Et, A = H, R1 = CH2Ph]. Over 150 I were prepared and tested against a number of fungi, including Venturia inaequalis, Cercosporidium personatum, and Puccinia recondita.

ACCESSION NUMBER: 1992:612154 CAPLUS

DOCUMENT NUMBER: 117:212154

TITLE: Preparation of (arylsulfonyl)hydroxyiminodimethylacetamides as agrochemical fungicides

INVENTOR(S): Brown, Richard James

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: PCT Int. Appl., 95 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9203050	A1	19920305	WO 1991-US5508	19910808
W: AU, BR, HU, JP, KR, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9184322	A1	19920317	AU 1991-84322	19910808
CN 1058880	A	19920226	CN 1991-105807	19910816
PRIORITY APPLN. INFO.:			US 1990-568485	A2 19900816
			WO 1991-US5508	A 19910808

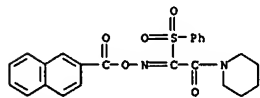
OTHER SOURCE(S): MARPAT 117:212154

IT 141457-51-4P 141457-52-5P 141458-54-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as agrochem. fungicide)

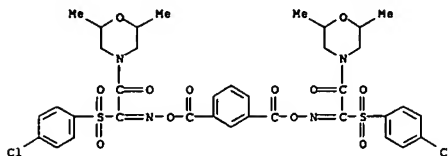
RN 141457-51-4 CAPLUS

CN Piperidine, 1-[[[(2-naphthalenylcarbonyl)oxy]imino] (phenylsulfonyl)acetyl]- (9CI) (CA INDEX NAME)



L8 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

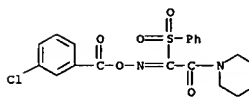


L8 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

RN 141457-52-5 CAPLUS

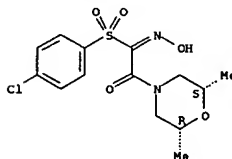
CN Piperidine, 1-[[[(3-chlorobenzoyl)oxy]imino] (phenylsulfonyl)acetyl]- (9CI) (CA INDEX NAME)



RN 141458-54-0 CAPLUS

CN Morpholine, 4-[[[(4-chlorophenyl)sulfonyl] (hydroxyimino)acetyl]-2,6-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

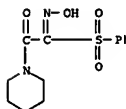


IT 141458-56-2P

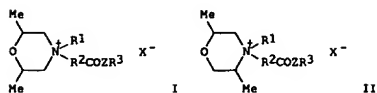
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as intermediate for agrochem. fungicides)

RN 141458-56-2 CAPLUS

CN Piperidine, 1-[[[(hydroxyimino) (phenylsulfonyl)acetyl]- (9CI) (CA INDEX NAME)



L8 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2006 ACS ON STN
ED Entered STN: 25 Nov 1989
GI



AB Mixts. of the title compds. I and II [R1 = C6-20; R2 = C1-6 alkylene; R3 = (unsubstituted alkyl, alkenyl, cycloalkyl, etc.; Z = O, S; X- = anion] (cis and/or trans) are prepared as fungicides and plant growth regulators. The fungicidal activity is both curative and preventive. Many target fungal species and host plants are listed. A mixture of cis- and/or trans-2,5-dimethyl-N-isotridecylmorpholine and cis- and/or trans-2,6-dimethyl-N-isotridecylmorpholine was refluxed with ClCH2CO2Me in NaI-containing acetonitrile, to give I-II (R1 = isotridecyl, R2 = CH2, R3 = Me, Z = O, X = Cl).

ACCESSION NUMBER: 1989:589581 CAPLUS
DOCUMENT NUMBER: 111:189581
TITLE: Morpholinoalkylcarboxylates as plant growth regulators and fungicides
INVENTOR(S): Ballschuh, Detlef; Banasiak, Lothar; Gruenzel, Hermann; Kluge, Eberhard; Lyr, Horst; Ohme, Roland; Rusche, Jochen; Seibt, Horst; Spengler, Dieter; Stoeckel, Christian
PATENT ASSIGNEE(S): Akademie der Landwirtschaftswissenschaften der DDR, Institut fuer Pflanzenschutzforschung, Ger. Dem. Rep.
SOURCE: Ger. (East), 28 pp.
CODEN: GEXXA8
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 263688	A1	19890111	DD 1985-278326	19850705
PRIORITY APPLN. INFO.:			DD 1985-278326	19850705

OTHER SOURCE(S): MARPAT 111:189581

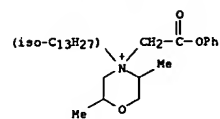
IT 123322-73-6P 123322-74-7P 123322-75-8P
123322-76-9P 123322-78-1P 123340-63-6P
123340-64-7P 123340-65-8P 123340-67-0P
123360-39-4P

RI: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as fungicide and plant growth regulator)

RN 123322-73-6 CAPLUS

CN Morpholinium, 4-isotridecyl-2,5-dimethyl-4-(2-oxo-2-phenoxyethyl)-, chloride (9CI) (CA INDEX NAME)

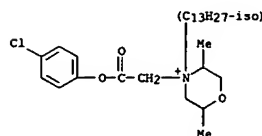
L8 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



● Cl⁻

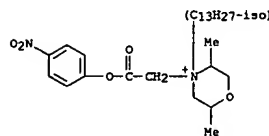
RN 123322-74-7 CAPLUS

CN Morpholinium, 4-[2-(4-chlorophenoxy)-2-oxoethyl]-4-isotridecyl-2,5-dimethyl-, chloride (9CI) (CA INDEX NAME)



RN 123322-75-8 CAPLUS

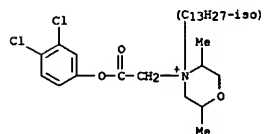
CN Morpholinium, 4-isotridecyl-2,5-dimethyl-4-[2-(4-nitrophenoxy)-2-oxoethyl]-, chloride (9CI) (CA INDEX NAME)



L8 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)

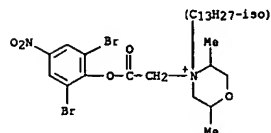
RN 123322-76-9 CAPLUS

CN Morpholinium, 4-[2-(3,4-dichlorophenoxy)-2-oxoethyl]-4-isotridecyl-2,5-dimethyl-, chloride (9CI) (CA INDEX NAME)



RN 123322-78-1 CAPLUS

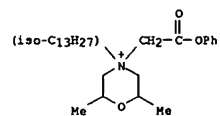
CN Morpholinium, 4-[2-(2,6-dibromo-4-nitrophenoxy)-2-oxoethyl]-4-isotridecyl-2,5-dimethyl-, chloride (9CI) (CA INDEX NAME)



RN 123340-63-6 CAPLUS

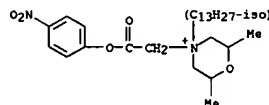
CN Morpholinium, 4-isotridecyl-2,6-dimethyl-4-(2-oxo-2-phenoxyethyl)-, chloride (9CI) (CA INDEX NAME)

L8 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



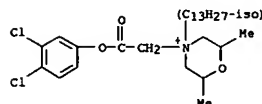
RN 123340-64-7 CAPLUS

CN Morpholinium, 4-isotridecyl-2,6-dimethyl-4-[2-(4-nitrophenoxy)-2-oxoethyl]-, chloride (9CI) (CA INDEX NAME)



RN 123340-65-8 CAPLUS

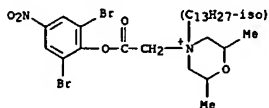
CN Morpholinium, 4-[2-(3,4-dichlorophenoxy)-2-oxoethyl]-4-isotridecyl-2,6-dimethyl-, chloride (9CI) (CA INDEX NAME)



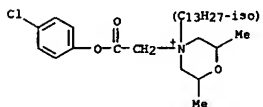
RN 123340-67-0 CAPLUS

CN Morpholinium, 4-[2-(2,6-dibromo-4-nitrophenoxy)-2-oxoethyl]-4-isotridecyl-2,6-dimethyl-, chloride (9CI) (CA INDEX NAME)

L8 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

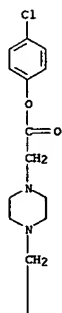
● Cl⁻

RN 123360-39-4 CAPLUS
 CN Morpholinium, 4-[2-(4-chlorophenoxy)-2-oxoethyl]-4-isotridecyl-2,6-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

L8 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



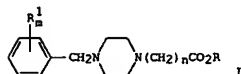
PAGE 2-A



● 2 HCl

RN 119950-59-3 CAPLUS
 CN 1-Piperazineacetic acid, 4-[(2,3,4-trimethoxyphenyl)methyl]-, phenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

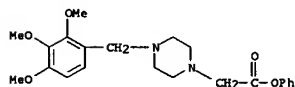
L8 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 12 May 1989
 GI



AB A series of 1-benzyl-4-piperazineacetates I (R = alkyl or aryl; R1 = H, Me, Cl, OMe; m = 1-3; n = 0-2) was synthesized and evaluated as antiulcer agents. Quant. structure-activity relationships (QSAR) analyses by using the ALS (adaptive least-squares) method were performed in each step to decrease the synthetic efforts. The QSAR for the esters is much the same as that for the previous examined amide derivs. The antiulcer activity of these compds. was considered to be based on the cytoprotective activity. The most active and the least toxic compds. were selected for further study.

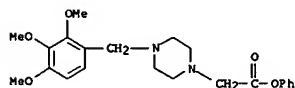
ACCESSION NUMBER: 1989:165541 CAPLUS
 DOCUMENT NUMBER: 110:165541
 TITLE: Benzylpiperazine derivatives. X. Syntheses and structure-antiulcer activity relationship of 1-benzyl-4-piperazineacetic acid esters
 AUTHOR(S): Ohtaka, Hiroshi; Yoshida, Kenji; Suzuki, Kenji; Shimohara, Koichi; Tajima, Shigeru; Ito, Keizo
 CORPORATE SOURCE: Pharm. Res. Cent., Kanebo Ltd., Osaka, 534, Japan
 SOURCE: Chemical & Pharmaceutical Bulletin (1988), 36(12), 4825-33
 CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 110:165541
 IT 119929-56-5P 119950-59-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and ulcer-inhibiting activity of)
 RN 119929-56-5 CAPLUS
 CN 1-Piperazineacetic acid, 4-[(2,3,4-trimethoxyphenyl)methyl]-, 4-chlorophenyl ester, dihydrochloride (9CI) (CA INDEX NAME)

L8 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● 2 HCl

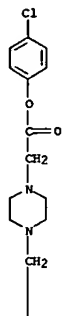
IT 119929-69-0 119929-72-5
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (ulcer-inhibiting activity of)
 RN 119929-69-0 CAPLUS
 CN 1-Piperazineacetic acid, 4-[(2,3,4-trimethoxyphenyl)methyl]-, phenyl ester (9CI) (CA INDEX NAME)



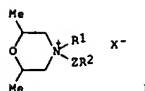
RN 119929-72-5 CAPLUS
 CN 1-Piperazineacetic acid, 4-[(2,3,4-trimethoxyphenyl)methyl]-, 4-chlorophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 36 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

L8 ANSWER 37 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 15 May 1987
GI

AB The title compds. [I: R = C6-20 alkyl; R2 = R321CO, (un)substituted PhO; R3 = (halo)alkenyl, alkynyl, (un)substituted alkyl, cycloalkyl, aryl, aralkyl; X1 = anion of a nonphytotoxic acid; Z = O, S; Z1 = Cl-6 alkylene; R3 and X- may be absent] were prepared as fungicides and plant growth regulators. A mixture of 30 g 4-isotridecyl-2,6-dimethylmorpholine and 10.9 g ClCH2CO2Me was refluxed 20 h in MeCN containing catalytic NaI to give 38

g I

(R1 = isotridecyl, R2 = CO2Me, X = Cl, Z = CH2) (II). At 10 µg/mL II gave 88% inhibition of growth of Botrytis cinerea. At 1000 mg/L II reduced the growth of cucumber plants by 32%.

ACCESSION NUMBER: 1987:156487 CAPIUS

DOCUMENT NUMBER: 106:156487

TITLE: Salts of morpholinocarboxylic esters and morpholinoalkyl phenyl ethers, processes for their preparation, and their use as fungicides and plant growth regulators.

INVENTOR(S): Banasiak, Lothar; Leuner, Brita; Lyr, Horst; Nega, Eva; Sunkel, Marianne

PATENT ASSIGNEE(S): Institut fuer Pflanzenschutzforschung Kleinmachnow, Ger. Dem. Rep.

SOURCE: Eur. Pat. Appl., 41 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 209763	A1	19870128	EP 1986-108916	19860701
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
DD 263685	A1	19890111	DD 1985-278323	19850705
DD 263687	A1	19890111	DD 1985-278325	19850705
AU 8659401	A1	19870108	AU 1986-59401	19860630
DK 8603151	A	19870106	DK 1986-3151	19860702
FI 8602851	A	19870106	FI 1986-2851	19860704
ZA 8605002	A	19870325	ZA 1986-5002	19860704
JP 62084065	A2	19870417	JP 1986-156349	19860704
HU 42288	A2	19870728	HU 1986-2826	19860704
HU 42286	A2	19870728	HU 1986-2827	19860704
ES 2001853	A6	19880701	ES 1986-125	19860704
PL 146362	B1	19890131	PL 1986-260474	19860704

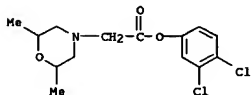
L8 ANSWER 37 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)
CS 264279 B2 19890613 CS 1986-5135 19860707
PRIORITY APPL. INFO.: DD 1985-278323 A 19850705
DD 1985-278325 A 19850705

IT 107561-93-3DP, quaternary derivs. 107561-99-9DP, quaternary derivs. 107562-00-5DP, quaternary derivs. 107562-11-8DP, quaternary derivs. 107581-23-7DP, quaternary derivs.

RL: SPN (Synthetic preparation); PREP (Preparation) (Preparation of, as fungicide and plant growth inhibitor)

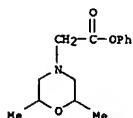
RN 107561-93-3 CAPIUS

CN 4-Morpholineacetic acid, 2,6-dimethyl-, 3,4-dichlorophenyl ester (9CI) (CA INDEX NAME)



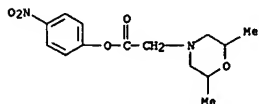
RN 107561-99-9 CAPIUS

CN 4-Morpholineacetic acid, 2,6-dimethyl-, phenyl ester (9CI) (CA INDEX NAME)



RN 107562-00-5 CAPIUS

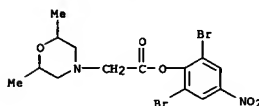
CN 4-Morpholineacetic acid, 2,6-dimethyl-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)



RN 107562-11-8 CAPIUS

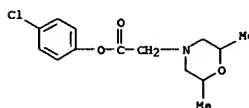
CN 4-Morpholineacetic acid, 2,6-dimethyl-, 2,6-dibromo-4-nitrophenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 37 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)

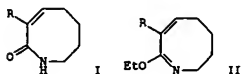


RN 107581-23-7 CAPIUS

CN 4-Morpholineacetic acid, 2,6-dimethyl-, 4-chlorophenyl ester (9CI) (CA INDEX NAME)

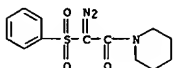


L8 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 24 Jan 1987
GI

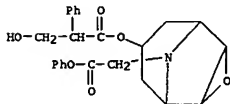


AB Tetrahydroazocinones I (R = H, PhS, PhSO₂) have been converted into the ethoxytetrahydroazocinones II with Meerwein's reagent. Upon irradiation under mercury lamp at longer wavelengths (Pyrex vessels) these compds. are inert, but at shorter wavelengths (quartz vessels) polymeric materials form with no evidence of intramol. cyclization. Reaction of I with bases, and with Me₃COCl lead to a variety of azocin-2(1H)-one deriva.

ACCESSION NUMBER: 1987:18338 CAPLUS
DOCUMENT NUMBER: 106:18338
TITLE: Further reactions in the tetrahydroazocin-2(1H)-one series
AUTHOR(S): Ridley, Damon D.; Simpson, Gregory W.
CORPORATE SOURCE: Dep. Org. Chem., Univ. Sydney, 2006, Australia
SOURCE: Australian Journal of Chemistry (1986), 39(4), 687-98
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 106:18338
IT 105495-20-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of)
RN 105495-20-3 CAPLUS
CN Piperidine, 1-[diazophenylsulfonyl]acetyl- (9CI) (CA INDEX NAME)

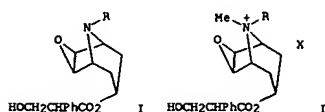


L8 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

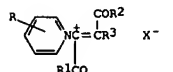
L8 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 14 Dec 1985
GI



AB (-)-Scopolamine (I, R = Me) was demethylated by 3 methods to give norscopolamine (I, R = H) which was alkylated to give I (R = alkyl) (26 compds.), which were quaternized to give the quaternary salts II (R = alkyl, X = Br, MeSO₃). (-)-II (R = Et, X = Br) was an anticholinergic bronchodilator with long duration of action.

ACCESSION NUMBER: 1985:596293 CAPLUS
DOCUMENT NUMBER: 103:196293
TITLE: Synthesis of anticholinergically active N-alkylnorscopolamines and their quaternary salts with particular consideration of the bronchospasmolytic compound (-)-N-ethylnorscopolamine methobromide (Ba 253 BR)
AUTHOR(S): Banholzer, R.; Pook, K. H.
CORPORATE SOURCE: Abt. Pharmachem., Boehringer Ingelheim K.-G., Ingelheim/Rhein, 6507, Fed. Rep. Ger.
SOURCE: Arzneimittel-Forschung (1985), 35(1A), 217-28
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: German
IT 98321-43-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 98321-43-8 CAPLUS
CN 3-Oxa-9-azatricyclo[3.3.1.0^{2,4}]nonane-9-acetic acid, 7-(3-hydroxy-1-oxo-2-phenylpropoxy)-, phenyl ester, hydrochloride, [7(S)-(1a,2b,4b,5a,7b)]- (9CI) (CA INDEX NAME)

L8 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 22 Sep 1985
GI

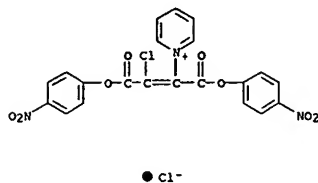
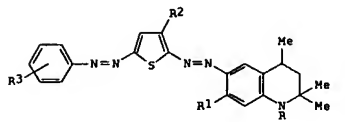


AB Title compds. I (R = H, alkyl, alkoxy, dialkylaminor R1, R2 = alkyl, aralkyl, aryl, alkoxy, aralkoxy, aryloxy, alkylthio, aralkylthio, arylthio; R3 = F, Cl, Br, iodo; X = halide, ClO₄-, BF₄-) were prepared by reacting R1COC.tplbond.COOR2 with halogen and (un)substituted pyridines (II); or by reacting R1COC.R4:CR5COR2 (R4, R5 = F, Cl, Br, iodo) with II; or by reacting R6COC.R7:CR8COR9 (R6-R9 = F, Cl, Br, iodo) with R1OH or R1SH and II. Thus, 4-O₂NC₆H₄O₂CCl:CClCO₂C₆H₄NO₂-4 was treated with pyridine to give 991 I (R = H, R1 = R2 = 4-O₂NC₆H₄O, R3 = Cl, X = Cl). I are useful as intermediates in the preparation of dyes, heterocycles, polymers, and biol. active substances.

ACCESSION NUMBER: 1985:497778 CAPLUS
DOCUMENT NUMBER: 103:497778
TITLE: N-(1,2-Diacyl-2-halo-1-vinyl)pyridinium salts
INVENTOR(S): Richter, Andreas M.; Fanghaenel, Egon
PATENT ASSIGNEE(S): Technische Hochschule "Carl Schorlemmer"
SOURCE: Leuna-Merseburg, Ger. Dem. Rep.
CODEN: GEXXAS
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 215308	A1	19841107	DD 1983-251654	19830602
PRIORITY APPLN. INFO:				
IT 97683-50-6P			DD 1983-251654	19830602
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)				
RN 97683-50-6 CAPLUS				
CN Pyridinium, 1-[2-chloro-3-(4-nitrophenoxy)-1-[(4-nitrophenoxy)carbonyl]-3-oxo-1-propenyl]-, chloride (9CI) (CA INDEX NAME)				

L8 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L8 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 20 Apr 1985
GI

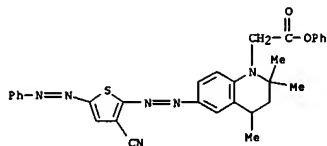
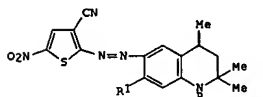
AB The title dyes were prepared having the general formula I (R = (un)substituted alkyl, allyl, cycloalkyl; R1 = H, halogen, alkyl, BzNH, AcNH, EtCONH; R2 = CN, alkoxycarbonyl, carbamoyl; R3 = H, halogen, NO2, CHO, SCN, CF3, alkoxycarbonyl). Thus, aniline [62-53-3] was diazotized and coupled with 2-amino-3-cyanothiophene [4651-82-5], and the resulting 2-amino-3-cyano-5-(phenylazo)thiophene [83749-49-9] was diazotized and coupled with 1-(2-methoxycarbonyl)ethyl-2,2,4-trimethyl-1,2,3,4-tetrahydroquinoline [95572-19-3] to obtain I (R = CH2CH2CO2Me, R1 = R3 = H, R2 = CN) [95572-21-7].

ACCESSION NUMBER: 1985:133542 CAPLUS
DOCUMENT NUMBER: 102:133542
TITLE: Blue disazo disperse dyes for polyester fibers
PATENT ASSIGNEE(S): Gosei Senryo Gijutsu Kenkyu Kumiai, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59193961	A2	19841102	JP 1983-68537	19830419
JP 03076349	B4	19911205		

PRIORITY APPLN. INFO.: JP 1983-68537 19830419
IT 95571-60-1
RL: TEM (Technical or engineered material use); USES (Uses)
(dye, blue, for polyester fibers)
RN 95571-60-1 CAPLUS
CN 1(2H)-Quinolineacetic acid, 6-[[3-cyano-5-(phenylazo)-2-thienyl]azo]-3,4-dihydro-2,2,4-trimethyl-, phenyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

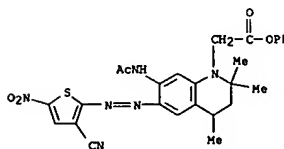
L8 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 10 Nov 1984
GI

AB The title dyes were prepared having general formula I (R = (un)substituted alkyl, allyl, cyclohexyl; R1 = H, Cl, Me, AcNH, EtCONH). Thus, 2-amino-3-cyano-5-nitrothiophene [56387-09-8] was diazotized and coupled with 1-(2-methoxyethyl)-2,2,4,7-tetramethyl-1,2,3,4-tetrahydroquinone [92585-52-9] to give light- and sublimation-fast blue I (R = CH2CH2OMe; R1 = Me) [92560-01-5].

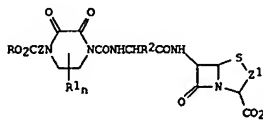
ACCESSION NUMBER: 1984:573021 CAPLUS
DOCUMENT NUMBER: 101:173021
TITLE: Bright blue disperse azo dyes for polyester fibers
PATENT ASSIGNEE(S): Gosei Senryo Gijutsu Kenkyu Kumiai, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59096170	A2	19840602	JP 1982-205258	19821122
JP 92559-63-2			JP 1982-205258	19821122

PRIORITY APPLN. INFO.: JP 1982-205258 19821122
IT 92559-63-2
RL: TEM (Technical or engineered material use); USES (Uses)
(dye, blue, for polyester fibers)
RN 92559-63-2 CAPLUS
CN 1(2H)-Quinolineacetic acid, 7-(acetamino)-6-[[3-cyano-5-nitro-2-thienyl]azo]-3,4-dihydro-2,2,4-trimethyl-, phenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 43 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
ED Entered STN: 12 May 1984
G1



AB Sixteen penicillins and cephalosporins I [R = ester-forming residues; R1 = H, alkyl; n = 0-2; R2 = aryl; R3 = H, ester-forming residues, salt-forming ions; Z = alkylene; Z1 = CH2, CH2C(CH2Z2R5); R5 = organic residues; Z2 = O, S] were prepared Min. inhibition concns. were given against 6 bacteria strains. Thus, a mixture of 4.8 g D(-)-α-(4-phthalidylloxycarbonylmethyl-2,3-dioxo-1-piperazinylcarboxamido)phenylacetic acid, 1.1 g Et3N, and 1 drop N-methylmorpholine in CH2Cl2 was kept 15 min at room temperature, 1.2 g ClCO2Et added at -50°, the mixture kept 60 min at -40° to -30° and 60 min at -30° to -20°, 3.2 g 6-aminopenicillanic acid-Et3N in CH2Cl2 added at -40°, and the mixture kept 60 min at -40° to -30°, 60 min at -30° to -20°, and 30 min at room temperature to give 75.2% D(-)-I (R = phthalidyl, R1 = R3 = H, R2 = Ph, Z = Z1 = CH2).

ACCESSION NUMBER: 1980:408164 CAPLUS
DOCUMENT NUMBER: 93:8164

TITLE: Penicillins and cephalosporins
INVENTOR(S): Saikawa, Isamu; Hori, Takako; Imaizumi, Hiroyuki; Konishi, Yoshikazu; Ochiai, Hirokazu; Hirakawa, Tatsu; Miyahara, Maki; Hayashiyama, Michiko; Sadaki, Hiroshi; et al.

PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JOKKAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54157586	A2	19791212	JP 1978-63794	19780530
PRIORITY APPLN. INFO.:			JP 1978-63794	A 19780530

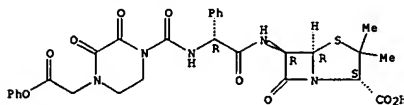
IT 73658-90-9P 73659-17-3P 73659-19-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 73658-90-9 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[2,3-dioxo-4-(2-oxo-2-phenoxyethyl)-1-piperazinyl]carbonyl]amino]phenylacetyl]amino]-3,3-

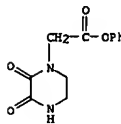
L8 ANSWER 43 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
dimethyl-7-oxo-, [25-[2α,5α,6β(5*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 73659-17-3 CAPLUS

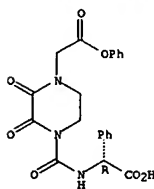
CN 1-Piperazineacetic acid, 2,3-dioxo-, phenyl ester (9CI) (CA INDEX NAME)



RN 73659-19-5 CAPLUS

CN 1-Piperazineacetic acid, 4-[[[carboxyphenylmethyl]amino]carbonyl]-2,3-dioxo-, α-phenyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 44 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 12 May 1984

G1 For diagram(s), see printed CA Issue.

AB Seven isoquinoline-2-acetamide derivs. (I, X = NCHRCNR1R2; R = H or Me; R1 = H, Me, Et, Pr, or CHMe2; R2 = H or Me) with muscle relaxant, sedative, antiarrhythmic, and anticonvulsive activities were prepared by various methods, e.g. by reaction of I (X = NH) with ClCHRCNR1R2 in the presence of Me3COK; from melts of I (X = O) or 2-(HO2CCMe2)C6H4CO2H and H2NCHRCNR1R2; or from I (X = NCHRCOR3, R3 = e.g. OH or Cl) and HNR1R2. Pharmaceutical compns. were reported.

ACCESSION NUMBER: 1974:120794 CAPLUS

DOCUMENT NUMBER: 80:120794

TITLE: Pharmaceutical isoquinoline-2-acetamides

INVENTOR(S): Kutter, Eberhard; Austel, Volkhard; Kaehling, Joachim; Ziegler, Harald

PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H.

SOURCE: Ger. Offen., 35 pp.
CODEN: GWKXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2237770	A1	19740214	DE 1972-2237770	19720801
FR 2194435	A1	19740301	FR 1973-27882	19730730
CH 611280	A	19790531	CH 1973-639078	19730730
CH 611887	A	19790629	CH 1973-498578	19730730
CH 611888	A	19790629	CH 1973-638978	19730730
CH 612184	A	19790713	CH 1973-638878	19730730
CH 615918	A	19800229	CH 1973-11065	19730730
BE 603086	A1	19740131	BE 1973-134124	19730731
NL 7310562	A	19740205	NL 1973-10562	19730731
JP 49080080	A2	19740802	JP 1973-86297	19730731
JP 55008973	B4	19800307		
AU 7358735	A1	19750206	AU 1973-58735	19730731
ES 417443	A1	19760316	ES 1973-417443	19730731
GB 1450793	A	19760929	GB 1973-36388	19730731
FI 52218	B	19770331	FI 1973-2412	19730731
AT 7306737	A	19750715	AT 1973-6737	19730801
AT 329059	B	19760426		
AT 7502259	A	19750715	AT 1973-225975	19730801
AT 7502260	A	19750815	AT 1973-226075	19730801
ES 422929	A1	19760616	ES 1974-422929	19740205
ES 422930	A1	19760616	ES 1974-422930	19740205
ES 422931	A1	19760616	ES 1974-422931	19740205
ES 422932	A1	19760616	ES 1974-422932	19740205
ES 422933	A1	19760616	ES 1974-422933	19740205
AT 7502258	A	19750915	AT 1975-2258	19750325
AT 330182	B	19760625		
AT 7502261	A	19750915	AT 1975-2261	19750325
AT 330183	B	19760625		
AT 7502262	A	19750915	AT 1975-2262	19750325
AT 330184	B	19760625		
CH 615423	A	19800131	CH 1978-4986	19780508

PRIORITY APPLN. INFO.:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2237770	A1	19740214	DE 1972-2237770	19720801
FR 2194435	A1	19740301	FR 1973-27882	19730730
CH 611280	A	19790531	CH 1973-639078	19730730
CH 611887	A	19790629	CH 1973-498578	19730730
CH 611888	A	19790629	CH 1973-638978	19730730
CH 612184	A	19790713	CH 1973-638878	19730730
CH 615918	A	19800229	CH 1973-11065	19730730
BE 603086	A1	19740131	BE 1973-134124	19730731
NL 7310562	A	19740205	NL 1973-10562	19730731
JP 49080080	A2	19740802	JP 1973-86297	19730731
JP 55008973	B4	19800307		
AU 7358735	A1	19750206	AU 1973-58735	19730731
ES 417443	A1	19760316	ES 1973-417443	19730731
GB 1450793	A	19760929	GB 1973-36388	19730731
FI 52218	B	19770331	FI 1973-2412	19730731
AT 7306737	A	19750715	AT 1973-6737	19730801
AT 329059	B	19760426		
AT 7502259	A	19750715	AT 1973-225975	19730801
AT 7502260	A	19750815	AT 1973-226075	19730801
ES 422929	A1	19760616	ES 1974-422929	19740205
ES 422930	A1	19760616	ES 1974-422930	19740205
ES 422931	A1	19760616	ES 1974-422931	19740205
ES 422932	A1	19760616	ES 1974-422932	19740205
ES 422933	A1	19760616	ES 1974-422933	19740205
AT 7502258	A	19750915	AT 1975-2258	19750325
AT 330182	B	19760625		
AT 7502261	A	19750915	AT 1975-2261	19750325
AT 330183	B	19760625		
AT 7502262	A	19750915	AT 1975-2262	19750325
AT 330184	B	19760625		
CH 615423	A	19800131	CH 1978-4986	19780508

IT 52074-68-7

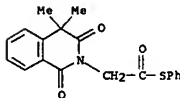
L8 ANSWER 44 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RL: RCT (Reactant); RACT (Reactant or reagent)

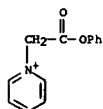
(reaction of, with ammonia)

RN 52074-68-7 CAPLUS

CN 2(1H)-Isoquinolineethanethioic acid, 3,4-dihydro-4,4-dimethyl-1,3-dioxo-, 5-phenyl ester (9CI) (CA INDEX NAME)

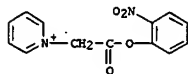


17 L8 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 12 May 1984
 AB The synthesis and reactivity of alkyl and aryl chloroacetamides were reviewed with 66 refs.
 ACCESSION NUMBER: 1972:434045 CAPLUS
 DOCUMENT NUMBER: 77:34045
 TITLE: Synthesis and reactivity of chloroacetamides
 AUTHOR(S): Svetkin, Yu. V.
 CORPORATE SOURCE: Chem. Fac., Bashk. State Univ., Ufa, USSR
 SOURCE: Wissenschaftliche Zeitschrift - Martin-Luther-Universität Halle-Wittenberg, Mathematisch-Naturwissenschaftliche Reihe (1972), 21(2), 99-123
 CODEN: WMGMAP; ISSN: 0138-1504
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: German
 IT 37161-48-1 37161-51-6 37161-52-7
 37161-53-8 37161-54-9
 RL: RCT (Reactant); RACT (Reactant or reagent))
 RN 37161-48-1 CAPLUS
 CN Pyridinium, 1-(2-oxo-2-phenoxyethyl)-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

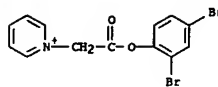
RN 37161-51-6 CAPLUS
 CN Pyridinium, 1-[2-(2-nitrophenoxy)-2-oxoethyl]-, chloride (9CI) (CA INDEX NAME)



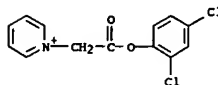
● Cl⁻

RN 37161-52-7 CAPLUS
 CN Pyridinium, 1-[2-(2,4-dibromophenoxy)-2-oxoethyl]-, chloride (9CI) (CA INDEX NAME)

L8 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

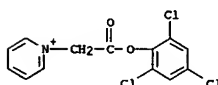


RN 37161-53-8 CAPLUS
 CN Pyridinium, 1-[2-(2,4-dichlorophenoxy)-2-oxoethyl]-, chloride (9CI) (CA INDEX NAME)



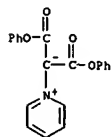
● Cl⁻

RN 37161-54-9 CAPLUS
 CN Pyridinium, 1-[2-oxo-2-(2,4,6-trichlorophenoxy)ethyl]-, chloride (9CI) (CA INDEX NAME)

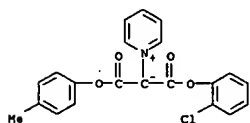


L8 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 12 May 1984
 GI For diagram(s), see printed CA Issue.
 AB The pyridinium malonate enol betaines I (R = Et, Bu, Ph, 2,4-Cl(Me)C6H3) and II (R1 = Et, Ph) in which the ester group is alkyl showed complete resonance of the ester carbonyls. I and II in which the ester group is phenolic on the other hand showed considerable ylide participation. In [(ethoxycarbonyl)(phenoxycarbonyl)methyl]pyridinium enol betaine the charge distribution was controlled largely by the alkyl ester group. The IR observations were confirmed by the chemical behavior of the betaines. Thus bis(phenoxycarbonyl)methylpyridinium enol betaine decomposed completely at its m.p. The Et and Bu malonates I underwent thermolysis to picolinic acid esters. Intramol. protonation is suggested as the first step in the thermolysis.

ACCESSION NUMBER: 1971:405645 CAPLUS
 DOCUMENT NUMBER: 75:5645
 TITLE: Reactions with betaine. 6. Chemistry of several malonate enol betaines
 AUTHOR(S): Wittmann, Helga; Kuhn-Kuhnenfeld, Johanna; Binder, H.; Sterk, Heinz; Ziegler, Erich
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Graz, Graz, Austria
 SOURCE: Monatsh. Chem. (1971), 102(2), 404-11
 CODEN: MOCHAP
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 IT 32092-55-0P 32092-56-1P 32254-13-0P
 32353-83-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 32092-55-0 CAPLUS
 CN Pyridinium, dicarboxymethylide, diphenyl ester (8CI) (CA INDEX NAME)

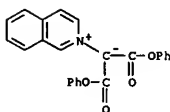


RN 32092-56-1 CAPLUS
 CN Pyridinium, dicarboxymethylide, o-chlorophenyl p-tolyl ester (8CI) (CA INDEX NAME)

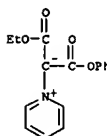


L8 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 32254-13-0 CAPLUS
 CN Isoquinolinium, dicarboxymethylide diphenyl ester (8CI) (CA INDEX NAME)



RN 32353-83-6 CAPLUS
 CN Pyridinium, dicarboxymethylide, ethyl phenyl ester (8CI) (CA INDEX NAME)

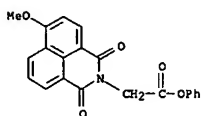


L8 ANSWER 47 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 12 May 1984
 GI For diagram(s), see printed CA Issue.
 AB I, heat-resistant fluorescent whiteners for synthetic fibers and plastics, are prepared by esterification of I (R1 = H). Thus, 30 parts 4-sulfonaphthalic anhydride Na salt in 158 parts 10% aqueous H2NCH2CO2H (II) was refluxed for 10 hr and salted with 14 parts NaCl. The solid (20 parts) was refluxed for 20 hr with 18.6 parts NaOH in 167 parts MeOH, cooled, and the solid purified by salting from 300 parts H2O and acidified to give I (R = Me, R1 = H, n = 1), m. 252-5° (aqueous HCONMe2). The condensation was also performed at room temperature with H2NCH2CO2Et instead of II. Similarly, the following I (R1 = H, n = 1) were prepared (R and m.p. given): Et, 262-3°; MeOCH2CH2, 222-3°; EtOCH2CH2, 193-4.5°; BuOCH2CH2, 158-60°. Esterification with R1OH and H2SO4 or POCl3 gave the following I (n = 1) with AmaxEtOH 365 8 mμ (R, R1, and m.p. given): Me, Me, 189-90°; Et, Et, 135-6°; Me, Et, 186-7°; Me, iso-Pr, 183-4°; Me, Bu, 137-8°; MeOCH2CH2, Et, 154.5-5.5°; MeOCH2CH2, Me, 145-6°; EtOCH2CH2, Et, 155-6°; BuOCH2CH2, Et, -, Me, Ph, 148-9°. Also prepared were I (R = R1 = Me) (n and m.p. given): O, 251-2°; Z, 14 4-5°.

ACCESSION NUMBER: 1970:134167 CAPIUS
 DOCUMENT NUMBER: 72:134167
 TITLE: Naphthalimide fluorescent whitening agents
 INVENTOR(S): Noguchi, Tamehiko; Tsukamoto, Kenkichi
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd.
 SOURCE: Jpn. Tokkyo Koho, 8 pp.
 CODEN: JAKXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

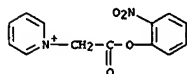
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 45002672	B4	19700129	JP	19670310

IT 25737-42-2P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation of)
 RN 25737-42-2 CAPIUS
 CN 1H-Benz[de]isoquinoline-2(3H)-acetic acid, 6-methoxy-1,3-dioxo-, phenyl ester (8CI) (CA INDEX NAME)



L8 ANSWER 48 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 12 May 1984
 AB Second-order rate consts. for reaction of a variety of charged and uncharged nucleophilic reagents with a series of neutral and charged o-nitrophenyl (o-NP) acetates of the type XCO2-o-NP (X = Me, Et, PhCH2, PhOCH2, EtSCH2, BrCH2, ClCH2, Cl2CHCH2, Me3N+CH2 and pyridiniummethyl (CH5B+CH2)) have been measured in aqueous solution at 30°, ionic strength = 1.0. The importance of electrostatic effects was adjudged for each nucleophile from plots of the log of the second-order rate consts. for water-catalyzed hydrolysis vs. the log of the second-order rate consts. for the individual nucleophile. The pos. charged esters exhibit abnormally rapid reactions with the anionic nucleophiles, acetate, phosphate, and carbonate but not with hydroxide nor trifluoroethoxide, and abnormally slow reactions with the amines, ethylenediamine, methoxyamine, and glycine ethyl ester. Since the deviations are observed with neutral amines and certain anionic nucleophiles and not others, electrostatic effects on collision frequency are adjudged to be insignificant. These results find explanation through electrostatic stabilization or destabilization of transition states.

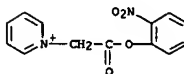
ACCESSION NUMBER: 1969:421584 CAPIUS
 DOCUMENT NUMBER: 71:21584
 TITLE: Electrostatic catalysis. III. Comparison of the reactivity of α-substituted o-nitrophenyl esters with anionic and amine nucleophiles
 AUTHOR(S): Holmquist, Barton; Bruice, Thomas C.
 CORPORATE SOURCE: Univ. of California, Santa Barbara, CA, USA
 SOURCE: Journal of the American Chemical Society (1969), 91(11), 2985-93
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 24265-35-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (substitution reaction of, kinetics of)
 RN 24265-35-8 CAPIUS
 CN Pyridinium, 1-(carboxymethyl)-, o-nitrophenyl ester (8CI) (CA INDEX NAME)



L8 ANSWER 47 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN (Continued)

L8 ANSWER 49 OF 52 CAPIUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 12 May 1984
 AB The pH-log khyd profiles for the hydrolysis of a series of α-substituted o-nitrophenyl acetate esters [XCO2-o-NP (X = Et, Me, PhCH2, EtSCH2, Me3N+CH2, PhOCH2, BrCH2, ClCH2, C5H5N+CH2, and Cl2CH)] have been determined in water at 30°, ionic strength = 1.0, between pH 1 and 12.53. The values of khyd at all pH values are quant. provided by summation of rates for spontaneous general base catalyzed hydrolysis (kH2O) and hydroxide ion catalyzed hydrolysis (XOH[HO-]). For the esters in which the α-substituent group equals Me, Et, and PhCH2 a specific acid catalyzed term (kH+H) must be included to provide khyd at low values of pH. A plot of log kH2O vs. log KOH for all esters, including the pos. charged species, was linear and follows the equation log KOH = 0.84 log kH2O + 8.0. The fact that esters containing formal pos. charges do not show pos. deviations from the plot of log KOH vs. log kH2O is indicative that electrostatic facilitation for the nucleophilic displacement of o-nitrophenoxide by hydroxide ion is unimportant.

ACCESSION NUMBER: 1969:421377 CAPIUS
 DOCUMENT NUMBER: 71:21377
 TITLE: Electrostatic catalysis. II. Comparison of spontaneous and alkaline hydrolytic rate constants for α-substituted o-nitrophenyl esters
 AUTHOR(S): Holmquist, Barton; Bruice, Thomas C.
 CORPORATE SOURCE: Univ. of California, Santa Barbara, CA, USA
 SOURCE: Journal of the American Chemical Society (1969), 91(11), 2982-5
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 24255-21-8
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (hydrolysis of, kinetics of)
 RN 24255-21-8 CAPIUS
 CN Pyridinium, 1-(carboxymethyl)-, bromide, o-nitrophenyl ester (8CI) (CA INDEX NAME)



● Br⁻

L8 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 22 Apr 2001
 GI For diagram(s), see printed CA Issue.
 AB Title compds. (I) were prepared for use as fungicides and disinfectants. A mixture of 14 g. 4-pyridyl n-dodecyl thio ether, 6 g. CH₂BrCH₂CH₂, and 50 ml. MeCN was refluxed 4 hrs., filtered over charcoal, and EtOAc added to the cool filtrate to give 751 I (R = n-dodecyl, R₁ = allyl, R₂ = H, X = Br, m. 59° (EtOAc). Similarly prepared were the following I (R, R₁, R₂, X, m.p. and 1 yield given): Me, Cl₂H₂5, H, p-Me-C₆H₄SO₃, 138-9°; 90°; Me, Cl₂H₂5, H, MeSO₃, 83°; 88°; Me, Cl₂H₂5, H, p-MeC₆H₄SO₃, 125-6°; 61°; Me, Cl₂H₂5, 3-Me, p-Me-C₆H₄SO₃, 52°; 36°; Me, o-HOC₆H₄, H, p-MeC₆H₄SO₃, 213°; 94°; Me, p-ClC₆H₄, H, p-MeC₆H₄SO₃, 153-5°; 89°; Me, o-HO₂CC₆H₄, H, p-MeC₆H₄SO₃, 173-5°; 70°; Me, o-O₂NC₆H₄, H, p-MeC₆H₄SO₃, 114°; 89°; Me, p-O₂NC₆H₄, H, p-MeC₆H₄SO₃, 170°; 75°; Me, p-ClC₆H₄CH₂, H, p-MeC₆H₄SO₃, 188°; 64°; HOCH₂CH₂, p-ClC₆H₄, H, Br, 150-1°; 92°; HO₂CC₆H₄, Cl₂H₂5, H, Cl, 93°; 54°; EtO₂CC₆H₄, Cl₂H₂5, H, Cl, 170°; 75°; iso-PrO₂CC₆H₄, Cl₂H₂5, H, Cl, 112°; 46°; BuO₂CC₆H₄, Cl₂H₂5, H, Cl, 84°; 49°; n-C₈H₁₇O₂CC₆H₄, C₈H₁₇, H, Cl, 169°; 42°; n-C₈H₁₇O₂CC₆H₄, Cl₂H₂5, H, Cl, 164-6°; 54°; n-C₁₂H₂₅O₂CC₆H₄, Et, H, Cl, 169-70°; 47°; PhO₂CC₆H₄, C₃H₇, H, Cl, wax-like; 39°; H₂NCOCH₂, Cl₂H₂5, H, Cl, 217° (decomposition); 76°; Et₂NCOCH₂, Cl₂H₂5, H, Cl, 82°; 89°; iso-PrO₂CC₆H₄, Cl₂H₂5, H, Cl, 114°; 48°; 2,4,5-Cl₃CC₆H₂CH₂, Cl₂H₂5, H, Cl, 100-101°; 66°; 2,4,5-Cl₃CC₆H₂CH₂, o-HOC₆H₄, H, Cl, 185-8°; 62°; 2,4,5-Cl₃CC₆H₂CH₂, p-ClC₆H₄, H, Cl, 183-4°; 98°; Cl₂H₂5, Me, H, Br, 105°; 51°; Cl₂H₂5, p-ClC₆H₄, H, Br, 104-5°; 76°; p-O₂NC₆H₄CH₂, Cl₂H₂5, H, Cl, 120-2°; 71°; CH₂CH₂CH₂, Cl₂H₂5, H, Br, 72-5°; 70°; CH₂CO₂Et, Cl₂H₂5, H, Cl, 150-3°; 66°; CH₂CO₂Et, p-ClC₆H₄CH₂, H, Cl, 166°; 42°; CH₂CO₂C₅H₁₁-n, Et, H, Cl, 180°; 64°; CH₂CO₂C₅H₁₁-n, Cl₂H₂5, H, Cl, 184°; 56°; CH₂CO₂C₅H₁₁-n, Cl₂H₂5, H, Cl, 175-8°; 70°; CH₂CO₂C₅H₁₁-n, p-ClC₆H₄CH₂, H, Cl, 193°; 38°; CH₂CO₂C₅H₁₁-n, Et, H, Cl, 168°; 48°; CH₂CO₂C₅H₁₁-n, Cl₂H₂5, H, Cl, 146-8°; 74°; CH₂CO₂C₅H₁₁-n, p-ClC₆H₄CH₂, H, Cl, 197°; 41°; PhCH₂, Cl₂H₂5, H, Cl, 113°; 56°; p-ClC₆H₄CH₂, Cl₂H₂5, H, Cl, 176-8°; 63°; 2,4,5-Cl₃CC₆H₂CH₂, Cl₂H₂5, H, Cl, 116°; 44°; p-MeC₆H₄CH₂, Cl₂H₂5, H, Cl, 30-40°; 30°; Cl₂H₂5, CH₂CH₂CH₂, H, Br, 63°; 35°; Me, CH₂CO₂C₅H₁₁-n, H, p-MeC₆H₄SO₃, 118-21°; 69°; Me, 2-ClOH₇, H, p-MeC₆H₄SO₃, 119°; 71°; CH₂CH₂CH₂, 2-ClOH₇, H, Br, 171-5°; 22°; Cl₂H₂5, C₈H₁₇, H, Br, 106-8°; 45°; 2,4-(O₂N)₂CC₆H₃, Cl₂H₂5, H, Cl, 154-5°; 67°; Cl₂H₂5, Ph, H, Br, 74-6°; 50°; Cl₂H₂5, p-ClC₆H₄CH₂, H, Br, 125-6°; 52°; CH₂CH₂CH₂, p-ClC₆H₄CH₂, H, Br, 124-6°; 84°; CH₂Ph, p-ClC₆H₄CH₂, H, Cl, 174-5°; 46°; CH₂Ph, p-ClC₆H₄, H, Cl, 210-12°; 50°; p-ClC₆H₄CH₂, p-ClC₆H₄, H, Cl, 184-6°; 78°; CH₂-CH₂CH₂, p-ClC₆H₄, H, Cl, 173-5°; 59°; o-ClC₆H₄CH₂, Cl₂H₂5, H, Cl, 79-81°; 63°; o-ClC₆H₄CH₂, p-ClC₆H₄, H, Cl, 188-9°; 54°; N-Methyl-4-thiopyridone (II) (2.5 g.), m. 150-5° (Me₂CO), was prepared from 5.5 g. 4-chloropyridine methiodide and 18 g. KSH. N-Methyl-4-n-dodecylthiopyridinium bromide (1.2 g.), m. 78-80° (EtOH-Et₂O), was prepared in 80% yield from 0.5 g. II and 1 g. n-Cl₂H₂5Br. 4-Cetylthio-1-methylpyridinium p-toluenesulfonate (50 g.) and 5 g. Na naphthalenesulfonate was dissolved in 10 l. H₂O to give a solution highly effective against Peronospora viticola and Phytophthora.

ACCESSION NUMBER: 1965:431609 CAPLUS
 DOCUMENT NUMBER: 63:31609
 ORIGINAL REFERENCE NO.: 63:5611b-g

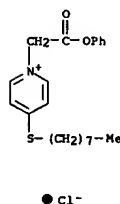
L8 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 22 Apr 2001
 GI For diagram(s), see printed CA Issue.
 AB Compns. (I), where R is an alkyl group with 1-16 C atoms, a chloro, hydroxy, carboxy, nitrophenyl, or a chlorobenzyl group, R₁ is a saturated or unsatd. alkyl group which may be substituted by a hydroxy, carboxy, carbalkoxy, carbamido, benzyl, or substituted benzyl group, R₂ is H or Me, and X is an organic or inorg. acid anion, were prepared 4-Pyridyldodecyl sulfide (14 g.) and 6 g. allyl bromide in 50 cc. MeCN were refluxed 4 hrs. The hot liquid was filtered (C), the product precipitated from the cooled solution with EtOAc, and recrystd. from this solvent to yield 15 g. N-allyl-4-dodecylthiopyridinium bromide, m. 59°. In applying the method to the preparation of various I, reaction temperature ranged from 70-130°, and reaction time from 1-20 hrs., the usual time being 8 hrs.; yields varied from 12-98%, most being over 50%. The following I were prepared (R₁, R₂, X, and m.p. given): Me, Cl₂H₂5, H, p-MeC₆H₄SO₃, 138-9°; Me, Cl₂H₂5, H, MeSO₃, 83°; Me, Cl₂H₂5, H, p-MeC₆H₄SO₃, 125-6°; Me, Cl₂H₂5, 3-Me, p-MeC₆H₄SO₃, 52°; Me, o-HOC₆H₄, H, p-MeC₆H₄SO₃, 213°; Me, p-ClC₆H₄, H, p-MeC₆H₄SO₃, 153-5°; Me, o-HO₂CC₆H₄, H, p-MeC₆H₄SO₃, 173-5°; Me, o-O₂NC₆H₄, H, p-MeC₆H₄SO₃, 114°; Me, p-O₂NC₆H₄, H, p-MeC₆H₄SO₃, 170°; Me, p-ClC₆H₄CH₂, H, p-MeC₆H₄SO₃, 188°; HOCH₂CH₂, p-ClC₆H₄, H, Br, 150-1°; HO₂CC₆H₄, Cl₂H₂5, H, Cl, 93°; EtO₂CC₆H₄, Cl₂H₂5, H, Cl, 170°; iso-PrO₂CC₆H₄, Cl₂H₂5, H, Cl, 112°; BuO₂CC₆H₄, Cl₂H₂5, H, Cl, 84°; C₈H₁₇O₂CC₆H₄, C₈H₁₇, H, Cl, 169°; C₈H₁₇O₂CC₆H₄, Cl₂H₂5, H, Cl, 164-6°; Cl₂H₂5O₂CC₆H₄, Et, H, Cl, 169-70°; PhO₂CC₆H₄, C₃H₇, H, Cl, waxy; H₂NCOCH₂, Cl₂H₂5, H, Cl, 217° (decomposition); Et₂NCOCH₂, Cl₂H₂5, H, Cl, 82°; iso-PrO₂CC₆H₄, Cl₂H₂5, H, Cl, 114°; 3,4-dichlorobenzyl, Cl₂H₂5, H, Cl, 100-1°; 2,4,5-trichlorobenzyl, o-HOC₆H₄, H, Cl, 185-8°; 2,4,5-trichlorobenzyl, p-ClC₆H₄, H, Cl, 183-4°; Cl₂H₂5, Me, H, Br, 105°; Cl₂H₂5, p-ClC₆H₄, H, Br, 104-5°; p-O₂NC₆H₄CH₂, Cl₂H₂5, H, Cl, 120-2°; CH₂CH₂CH₂, Cl₂H₂5, H, Br, 72-5°; EtO₂CC₆H₄, Cl₂H₂5, H, Cl, 150-3°; EtO₂CC₆H₄, p-ClC₆H₄CH₂, H, Cl, 166°; C₅H₁₁O₂CC₆H₄, Et, H, Cl, 180°; C₅H₁₁O₂CC₆H₄, Cl₂H₂5, H, Cl, 184°; C₅H₁₁O₂CC₆H₄, Cl₂H₂5, H, Cl, 175-8°; C₅H₁₁O₂CC₆H₄, p-ClC₆H₄CH₂, H, Cl, 193°; C₈H₁₇O₂CC₆H₄, Et, H, Cl, 168°; C₈H₁₇O₂CC₆H₄, Cl₂H₂5, H, Cl, 146-8°; C₈H₁₇O₂CC₆H₄, p-ClC₆H₄CH₂, H, Cl, 197°; PhCH₂, Cl₂H₂5, H, Cl, 113°; p-ClC₆H₄CH₂, Cl₂H₂5, H, Cl, 176-8°; 2,4,5-trichlorobenzyl, Cl₂H₂5, H, Cl, 116°; p-MeC₆H₄CH₂, Cl₂H₂5, H, Cl, 30-40°; 30°; Cl₂H₂5, CH₂CH₂CH₂, H, Br, 63°; 35°; Me, CH₂CO₂C₅H₁₁-n, H, p-MeC₆H₄SO₃, 118-21°; 69°; Me, 2-ClOH₇, H, p-MeC₆H₄SO₃, 119°; 71°; CH₂CH₂CH₂, 2-ClOH₇, H, Br, 171-5°; 22°; Cl₂H₂5, C₈H₁₇, H, Br, 106-8°; 45°; 2,4-(O₂N)₂CC₆H₃, Cl₂H₂5, H, Cl, 154-5°; 67°; Cl₂H₂5, Ph, H, Br, 74-6°; 50°; Cl₂H₂5, p-ClC₆H₄CH₂, H, Br, 125-6°; 52°; CH₂CH₂CH₂, p-ClC₆H₄CH₂, H, Br, 124-6°; 84°; CH₂Ph, p-ClC₆H₄CH₂, H, Cl, 174-5°; 46°; CH₂Ph, p-ClC₆H₄, H, Cl, 210-12°; 50°; p-ClC₆H₄CH₂, p-ClC₆H₄, H, Cl, 184-6°; 78°; CH₂-CH₂CH₂, p-ClC₆H₄, H, Cl, 173-5°; 59°; o-ClC₆H₄CH₂, Cl₂H₂5, H, Cl, 79-81°; 63°; o-ClC₆H₄CH₂, p-ClC₆H₄, H, Cl, 188-9°; 54°; N-Methyl-4-thiopyridone (II) (2.5 g.), m. 150-5° (Me₂CO). On heating 0.5 g. of the thione with 1 g. Cl₂H₂5Br in BrOH 1 hr. at 90°, then cooling, precipitating the product with ether, and reprecip. from EtOH with ether, 1.2 g. 4-dodecylthio-N-methylpyridinium bromide, m. 78-80°, was obtained. These compds. are suitable as medical and industrial disinfectants. Because of their low phytotoxicity, they can also be used as very effective fungicides for plants. They are particularly effective against fungi which are difficult to combat, e.g. Aspergillus niger and Candida albicans. A composition made by mixing 50 g. 4-cetylthio-1-methylpyridinium p-toluenesulfonate, 45 g. kaolin, and 5 g. Na naphthalenesulfonate and adding water to a volume of 10 l. was very effective against Plasmodium viticola and Phytophthora.

ACCESSION NUMBER: 1964:19698 CAPLUS

Page 5906/09/2006

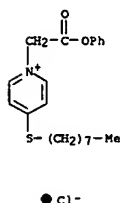
L8 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 TITLE: Quaternary 4-pyridyl thio ethers
 PATENT ASSIGNEE(S): Boehringer Ingelheim G.m.b.H.
 SOURCE: 12 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 992157		19650519	GB 1962-32697	19620824
PRIORITY APPLN. INFO.:				19610825
IT 1816-59-7, Pyridinium, 1-(carboxymethyl)-4-(octylthio)-, chloride, Ph ester				
RN 1816-59-7 CAPLUS				
CN Pyridinium, 4-(octylthio)-1-(2-oxo-2-phenoxymethyl)-, chloride (9CI) (CA INDEX NAME)				



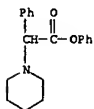
L8 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 DOCUMENT NUMBER: 60:19698
 ORIGINAL REFERENCE NO.: 60:1712d-h, 1713a-b
 TITLE: Disinfectant and fungicidal quaternary pyridyl 4-thio ethers
 INVENTOR(S): Sohn, C. H. Boehringer
 SOURCE: 15 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 621044		19630222	BE	19610825
PRIORITY APPLN. INFO.:				
IT 1816-59-7, Pyridinium, 1-(carboxymethyl)-4-(octylthio)-, chloride, Ph ester				
RN 1816-59-7 CAPLUS				
CN Pyridinium, 4-(octylthio)-1-(2-oxo-2-phenoxymethyl)-, chloride (9CI) (CA INDEX NAME)				



L8 ANSWER 52 OF 52 CAPLUS COPYRIGHT 2006 ACS on STN
 ED Entered STN: 22 Apr 2001
 AB Intermediate substances for therapeutically active α -phenyl- α -dialkylaminoacetic acid dialkylaminoethyl esters of the formula PhCH(R1)CO2R2 , where R1 is a secondary amine and R2 a substituted or nonsubstituted phenyl group, are obtained by condensation of a α -phenyl- α -dialkylaminoacetic acid HCl salt and a phenol in the presence of POCl3. Those substances are hitherto unknown. E.g.: phenylpiperidinoacetic acid HCl salt (49 g.) was dissolved in 150 ml. CSH5N on the H2O bath, the solution cooled, 19 g. PhOH in 50 ml. CSH5N added, then, dropwise, 30 g. POCl3 (violent reaction). After the reaction has subsided the whole was boiled 1 hr. on the H2O bath, H2O added and the separated oil distilled, b.p. 171-5°. The HCl salt, m. 110-12°, can be obtained by treating the ester with HCl gas in an Et2O solution
 ACCESSION NUMBER: 1959:1938 CAPLUS
 DOCUMENT NUMBER: 53:1938
 ORIGINAL REFERENCE NO.: 53:298a-c
 TITLE: Substituted esters of phenylacetic acid
 INVENTOR(S): Bothe, Horst; Wunderlich, Helmut
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 10328		19550825	DD	
IT 102177-79-7,		1-Piperidineacetic acid, α -phenyl-, phenyl ester		
		(preparation of)		
RN 102177-79-7		CAPLUS		
CN 1-Piperidineacetic acid, α -phenyl-, phenyl ester (6CI)		(CA INDEX NAME)		



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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

451.98

787.39

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-66.00

-66.00

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